
Industry Skills Forecast and Proposed Schedule of Work

Education

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and Proposed Schedule
of Work*

Education

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DRAFT

Executive summary



The Vocational Education and Training (VET) industry is a critical pillar of the Australian education and training system. The VET industry provides learners with work ready skills for the labour force and flexible training pathways to gain new skills to progress their careers and employability. The Training and Education (TAE) and Foundation Skills (FSK) Training Packages are critical elements in this system, playing central roles in the training of all learners that engage in the VET sector. In particular, the TAE is fundamental to the functioning of the VET system as a whole as it houses the qualifications and units that prepare teachers and practitioners to deliver vocational education and training. As such, a productive and valuable VET sector is contingent upon a robust TAE Training Package that appropriately skills the VET teacher and practitioner workforce to provide quality training to learners.

The role of the VET sector in Australian society is evolving in response to emerging market demand for reskilling and training. Key trends impacting the VET sector and, subsequently, the VET workforce, include:

- Structural changes to industries and workplaces changing workforce demand for training, education and skills.
- Technological developments impacting how vocational education material is delivered, as well as the content of vocational training.
- Vocational education reform catalysing concern and instability amongst teachers and practitioners in the sector.
- Learner cohort changes placing pressure on the VET workforce to meet an array of learner needs.

Within this environment of change, the parameters of VET teacher and practitioner job roles will be impacted. For example, there will be an increased demand for practitioners in growth industries, practitioners will need a strong digital literacy baseline to engage with learners online, and they will need to have the skills to simultaneously engage learners with an array of learning needs. Therefore, it will be critical that VET teachers and practitioners are trained with the appropriate skills and capabilities to meet the evolving needs of learners and the sector more broadly. Indeed, if appropriately skilled to meet changing demand trends, the VET workforce and sector will have the opportunity to play a central role in skilling the workforce for the jobs of the future. To ensure this opportunity is met, it is essential that the Training and Education (TAE) Training Package is appropriately configured.

In response to these drivers for change, the Education Industry Reference Committee (IRC) has proposed a review of the Training and Education (TAE) Training Package. The parameters of the review will include an assessment of the structure and content of the TAE Training Package to ensure learners are appropriately prepared for job roles and workplaces of the future. This Industry Skills Forecast and Proposed Schedule of Work (ISFPSW) provides the basis for the review of the TAE and the need for the Training Package to accurately reflect current and future trainer and assessor job roles. This is delineated in the following segments:

1. **Sector Overview** – This section outlines the parameters of the VET teacher and practitioner workforce, including where individuals in the sector are employed, the activities undertaken, and the challenges and opportunities faced by learners and workers.
2. **Employment and Skills Outlook** – Current and future employment projections in the VET sector and factors that may influence the supply of graduates to fill these positions are discussed to understand future supply and demand within the sector. The skills needs and job roles of these learners and workers are considered through a lens of the trends affecting the VET industry as a whole, including structural changes to industries and increased demand for training. This assessment is central to informing an understanding of future job roles and necessary skills needs within the sector more broadly, as well as the specific elements that may need inclusion in the Training Package.

3. **Key Drivers for Change and Proposed Responses** – This section serves as the Case for Change for TAE and FSK projects scheduled in 2018-19. It outlines the factors driving change in the VET teacher and practitioner workforce, including the evolving role of training, the transformation of VET sector job roles and a changing VET learner cohort. These factors are changing the current and future job roles of VET teachers and practitioners and the TAE Training Package must be updated to reflect the skill and capability requirements of the job roles.
4. **Proposed Schedule of Work** – The implication of the trends and drivers affecting the VET sector workforce is necessary modifications to the TAE Training Package. Drawing on the above analysis of trends and skills needs, the Proposed Schedule of Work articulates the training product development priorities within the TAE and FSK Training Package. The purpose of the schedule is to ensure that learners are appropriately skilled to enter a sector affected by the above trends. A summary of this schedule of work is presented in Table 1 below.

Table 1: Summary Proposed Schedule of Work

Year	Project type	Project code	Project name	Number of Native UoCs		
				Native	Imported	Total
2017-18	Additional activity	2d	Review career pathways in the Training and Education Training Package	N/A	N/A	N/A
Total UoCs planned to be reviewed in year 2				0	0	0
2018-19	Training product development	1b	Review of all Units of Competency in TAE v2.1	54	10	64
Total UoCs planned to be reviewed in year 3				54	10	64
2020-21	Training product development	1c	Review of all FSK Units of Competency for currency	91		
Total UoCs planned to be reviewed in year 5				91	0	91
2021-22	Training product development	1d	Review training products originally in scope for 2017/18 for currency and relevance	Unknown		
2021-22	Training product development	1e	Review the need for the creation of new training products to cater for new and emerging technologies and related skills	Unknown		
Total UoCs planned to be reviewed in year 6				Unknown		

Note: Given the broad stakeholder engagement and in depth assessment of the TAE that will need to be undertaken in 2018-19 for project 1b, no projects have been scheduled for year 4. Year 4 will be utilised to continue project 1b to ensure full stakeholder consultation is undertaken prior to any submissions to the AISC.

Note, sections 2 to 4 of this ISFPSW focus on the Training and Education Training Package (TAE release 2.1) and the occupations and organisations relevant to the qualifications within the Package. The Education Industry Reference Committee (IRC) also has oversight of the Foundation Skills Training Package (FSK release 1.1). PwC's Skills for Australia and the Education IRC received early approval for a review of the Foundation Skills Training Package. Given that the review is underway, and as the Training Package is unique in its structure and lack of occupational outcomes, we will briefly touch on the issues facing the Training Package in 15Appendix B, as well as referencing the FSK Training Package review in the Proposed Schedule of Work in Section 4.



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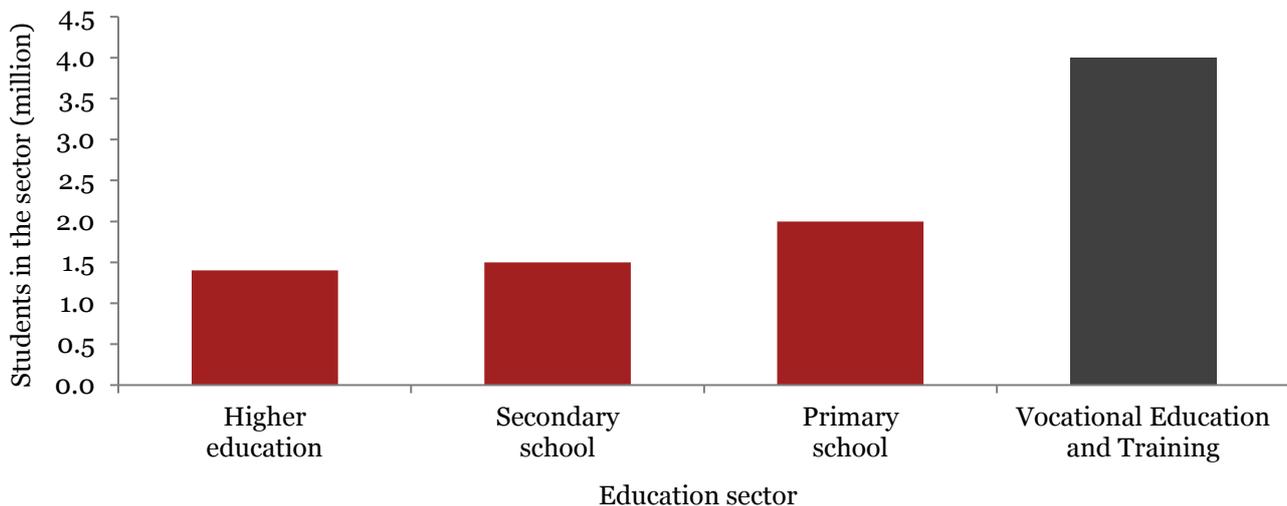
1 Sector Overview

1.1 The sector at a glance

The education and training industry is broad, encompassing the teaching of primary, secondary, vocational and higher education. Within this industry, the vocational education and training (VET) sector prepares learners with work ready skills for the labour market.

The differentiation between higher education and vocational training has typically focused on the research and curriculum focus of the former, and the competency focus of the latter. However, with the growing demand for new and emerging skills, and the fluid nature of modern learning requirements, the distinction between further education pathways is less defined. As noted in the Bradley Review, 'there should be better connections across tertiary education and training to meet economic and social needs which are dynamic and not readily defined by sectoral boundaries'.¹

Figure 1: Number of students by sector in 2016 (millions)



Sources: Australian Bureau of Statistics (ABS) (2017) *Schools, Australia, 2016, Catalogue 4221.0*, National Centre for Vocational Education and Research (2017) *Students and courses 2016*, Department of Education (2017) *Higher education statistics 2016*

The Training and Education (TAE) Training Package prepares individuals to deliver vocational education and training. The importance of this Training Package is reflected in the sheer number of VET learners, each of whom will receive their training from a TAE graduate. The VET sector educates more learners than the primary, secondary or university sectors (see Figure 1), with approximately 24 per cent of people in Australia aged 15-65 enrolled in VET in 2016.² Therefore, the reach of the VET sector and TAE graduates is significant.

It is difficult to quantify the number of workers engaging in training and assessment. Whilst some workers will undertake training and assessment as the sole function of their job role, for others, training may only be a small aspect. For individuals in the latter category, they may not identify as a vocational teachers and practitioners and may not be directly involved with or employed by an RTO, thereby hampering accurate data collection in

¹ Prepared for the Department of Education, Employment and Workplace Relations by Denise Bradley, Helen Nugent and Bill Scales (2008) *Review of Australian higher education: final report*

² NCVET (2017) *Total VET Students and Courses 2016*

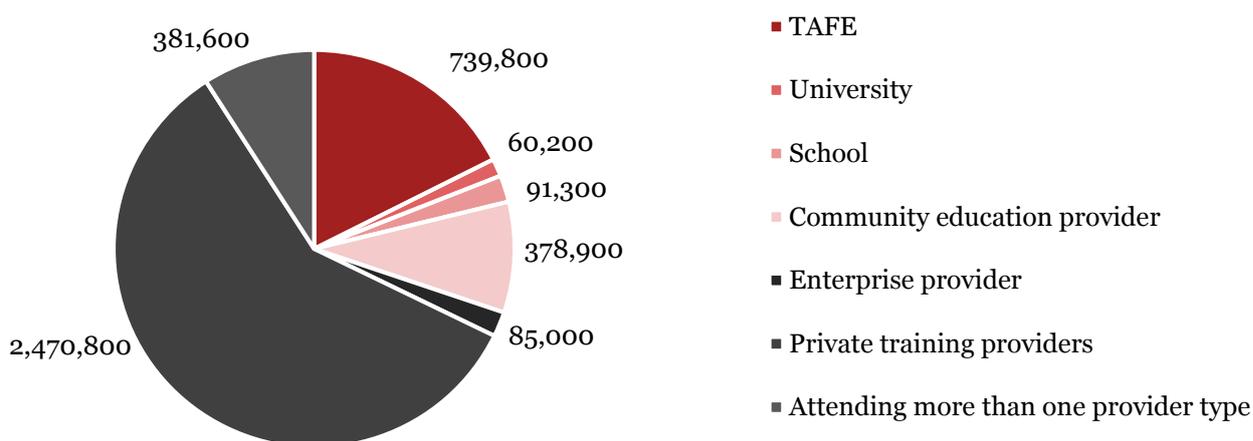
labour surveys. Therefore, whilst Australian Bureau of Statistics data suggests that there were 26,300 qualified VET practitioners in 2017, the number of individuals undertaking training and assessment functions and utilising skills from the TAE Training Package is likely to be significantly higher. ³

1.2 Sub-sector descriptions

Within the VET sector there are a diverse array of training providers - see Figure 2. Indeed, when compared to the higher education sector, the number of training providers and the ratio of providers-to-learners varies significantly. In 2016 there were 1,457,209 higher education students attending 138 higher education providers,⁴ a ratio of 10,559 learners to a single provider. This compares to 4,207,700 VET learners attending 4279 training providers in 2016, equating to just 983 learners per RTO. ⁵ This differentiation can be attributed to a number of factors, including regulation and funding, as well as the occupation-focused nature of vocational education which necessitates a degree of specialisation.

A real strength of the VET sector is the diversity of its provider network.
Rod Camm, CEDA, *VET: securing skills for growth*, August 2016, p 61

Figure 2: VET students by provider type, 2016



Source: NCVET, *Total VET Activity 2016*

Below is a brief summary of the different types of training providers/businesses that comprise the sector and their core characteristics. Providers not mentioned below include professional associations, unions and equipment/product manufacturers (vendors).

³ As of December 2016, ABS (Dec 2016) *Labour Force Survey Detailed Quarterly Catalogue 6291.0.55.003* (‘vocational education teachers’)

⁴ Department of Education and Training (2017) *2016 Student Summary*; Universities Australia (2017) Data Snapshot

⁵ NCVET (2017) *Total VET students and courses 2016*

Table 2: Types of VET providers/businesses in the sector

Technical and Further Education (TAFE)

Description: TAFEs have a long history in Australia, with the first TAFE (the Mechanics Institute) established in Hobart in 1827. TAFE became a nationally recognised and distinct part of the education system in the 1970s, following the large role it played in training the post-war workforce in the 1950s and 60s. TAFEs are traditionally owned, and sometimes operated, by State and Territory Governments. TAFEs predominantly offer nationally accredited qualifications from Certificate I to Graduate Diploma qualifications, though some also have scope to deliver bachelor degrees and high school qualifications in certain states and territories.

Number: 42

Workers: Occupations within TAFEs are varied, but include TAFE trainers and assessors, curriculum and training developers and TAFE Directors.

Learners: In 2016, there were 739,800 learners enrolled in TAFEs across Australia.

Private Registered Training Organisations

Description: In the early 2000s, the teaching of VET moved from being predominantly offered in TAFEs to a greater mix of public and private training organisations. Private RTOs tend to be incorporated and for-profit, but draw from a variety of funding sources.

Number: 3187

Workers: There is limited information available on the private RTO workforce, however, sources indicate the workforce has been highly casualised in the past.⁶

Learners: There were an estimated 2,470,800 million learners enrolled in private RTOs in 2016.

Enterprise Registered Training Organisations

Description: Enterprise RTOs (ERTOs) operate as both training providers and employers. In contrast the other RTOs, the core business of an ERTO is not the teaching of vocational education and training. Within the ERTO model, training is primarily conducted on the job and assessments are developed in relation to job roles and will not necessarily mirror traditional assessment mechanisms, such as performance reviews as evidence. Additionally, assessments are not created by those conducting the assessment, rather, they are created centrally and are prescriptive of what evidence is to be created. The purpose of this assessment is to produce job-ready candidates to meet enterprise goals. ERTOS include government (e.g. Department of Defence), non-government private (e.g. McDonalds) and community (e.g. Surf Life Saving Australia) organisations, and represent a variety of industries and business sizes.

Number: 185

Workers: The size of the workforce is difficult to estimate as many workers deliver training outside of their primary vocation, and so do not formally identify as trainers. Deliverers of training within ERTOS range from dedicated VET teachers and practitioners to other workers (for example, business unit team leaders, foreman, supervisors, experienced employees) who deliver the training under the guidance and advice of qualified professionals.

Learners: Learners are usually the employees of the enterprise, and tend to be 'front line employees'. There were 85,000 learners in 2016.

Community Registered Training Organisations

Description: Adult Learning Australia, a peak body for community training, characterises community RTOs as going 'by a wide variety of names including Community Colleges, Community Learning Centres,

⁶ Productivity Commission (April 2011) Research Report - *Vocational Education and Training Workforce*

Learn Local Providers, Neighbourhood Houses, WEA's and many more'.⁷ Regardless of their title, key characteristics are that they specialise in adult education, offer VET qualifications and are not-for-profit. Community Colleges Australia (CCA) has noted that a primary concern of community RTOs is funding, particularly given the expense of delivering in regional and remote areas (common for community RTOs) and the minimal resources available for investment in marketing and relationship building to improve the number of work placements and learner outcomes.⁸

Number: 426

Workers: There has traditionally been a heavy reliance on volunteers,⁹ however Community Colleges Australia (CCA) recently reported that the role of volunteerism is expected to fall over time as larger student numbers and higher demands of compliance and regulation are raising the complexity of job roles in community education, especially administrative tasks.

Learners: There were approximately 378,900 learners enrolled in community education in 2016.

Schools delivering VET

Description: 'VET Delivered to Secondary Students' programs provide students with training and credits towards a VET qualification. They are designed to expand pathways for students to improve post-compulsory schooling educational outcomes. It should be noted that, whilst some schools are registered as RTOs and deliver VET directly to their students, other institutions engage external RTOs to deliver VET programs.¹⁰

Number: 425. Note, when including the number of schools that deliver VET in partnership with an established RTO, this figure is likely to be higher.

Workers: Teachers must hold a secondary education teaching qualification as well as meet the relevant vocational education requirements. Stakeholder commentary suggests increasingly complex and onerous regulations to become an RTO provide a hurdle for schools and teachers.

Learners: There were 91,300 students in 2016.

Universities delivering VET

Description: Higher education has historically distinguished itself from VET by being curriculum and research based, whereas VET is competency focused. However, as noted above, the boundaries between education options in Australia are increasingly fluid. Universities delivering VET qualifications assist in bridging gaps between VET and higher education and can enable more fluid learning pathways for learners. Indeed, dual sector institutions (for example, RMIT) provide tangible connections between the higher education and VET sectors as they offer both VET and higher education courses. This provides learners with pathways across the AQF bands. This compares to non-dual sector universities that administer a separate RTO, for example, the University of Queensland.

Number: 15 registered as RTOs.

Workers: There is limited information on the workers that deliver VET within universities, such as whether they teach at both the vocational and higher education level and whether they conduct research in addition to teaching.

Learners: In 2016 there were 60,200 learners.

Sources: NCVER, *Total VET students and courses 2016* <https://www.ncver.edu.au/__data/assets/pdf_file/0026/796211/Total-VET-students-and-courses-2016.pdf>. It should be noted that there are some limitations with Total VET Activity data, including collection and codification.

⁷ Adult Learning Australia <<http://communityeducation.net.au/about-community-education-and-training/community-education-and-training/>> (accessed 23 March 2018)

⁸ Community Colleges Australia (2016) *More Art than Pottery: Community Education Providers' involvement in work-based learning and foundation skills*

⁹ Productivity Commission (April 2011) *Research Report - Vocational Education and Training Workforce*

¹⁰ Victorian Department of Education and Training (2018) *VET Programs for Secondary Students*

Note 1: 381,600 students attended more than one training provider type.

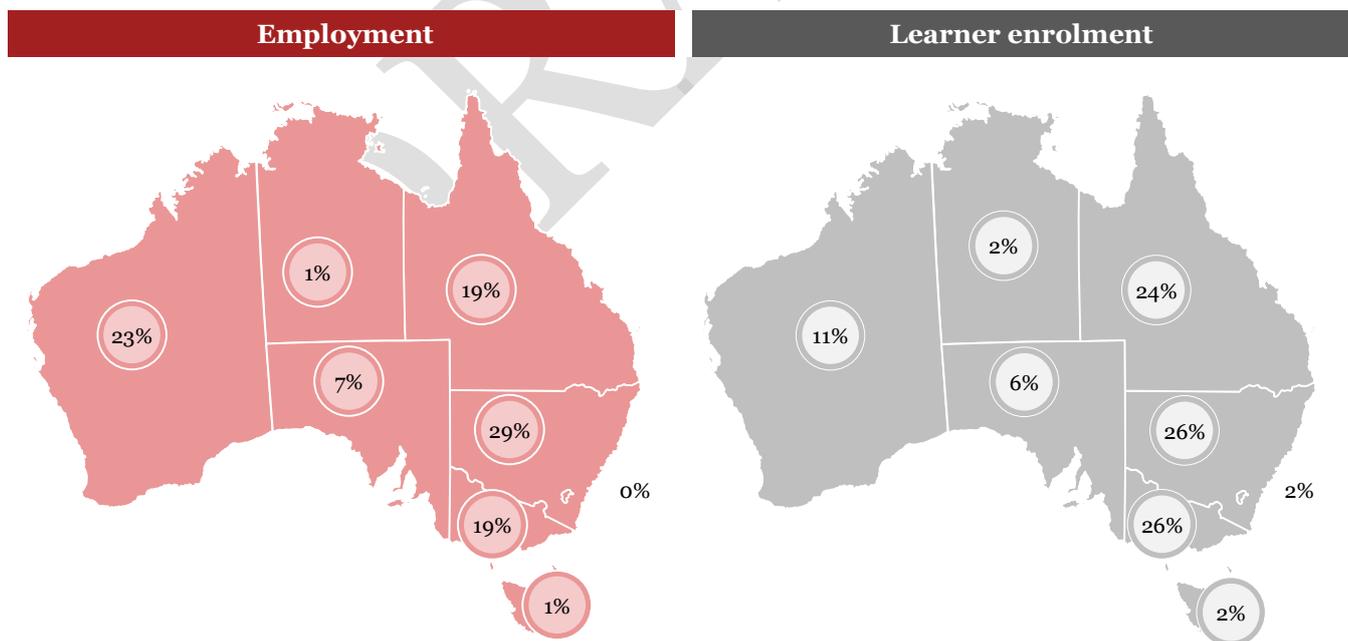
1.3 State by state overview

VET is primarily the responsibility of the State and Territory governments, creating several differences across jurisdictions despite increased Commonwealth influence in recent years. Given these differences, it is important to consider the sector through a state and territory lens. Key differentiating factors between the states and territories include:

- **Funding arrangements** differ between states and territories, allowing jurisdictions to provide financial incentives for learners to enrol in qualifications that align with the state or territory's economic interests. For example, most State and Territory Governments offer subsidies for 'priority skills' within targeted programs.¹¹ Additionally, the Commonwealth Government launched a new student loans program in January 2017, with VET Student Loans replacing the VET FEE-HELP scheme.¹² The cost of VET is a major factor influencing VET enrolments, thus funding is a major driver of jurisdictional differences.
- **Regulation** differs slightly on a state and territory basis, though the registration, monitoring and compliance of training providers is largely carried out nationally by the Australian Skills Quality Authority (ASQA), except where training providers operate solely in Victoria (VRQA) and Western Australia (TAC).¹³
- **Economic drivers** shape the composition of state and territory education sectors. Given this influence, it is unsurprising that the number of workers and learners differ on a state and territory basis, and may have a higher/lower representation comparative to the population.

Figure 3 illustrates the geographical distribution of learners in the TAE Training Package and workers in the sector.

Figure 3: Geographic spread of workers and learners



Source: ABS 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, November 2017, NCVER (2017) *Total VET Activity 2016*

¹¹ See e.g. Government of Western Australia Department of Training and Workforce Development (2016) *Future Skills WA – Priority industry qualifications list* <<http://www.futureskillswa.wa.gov.au/trainingcourses/Documents/Priority%20industry%20qualifications%20list.pdf>> Accessed 6 July 2016.

¹² See Department of Education and Training (2017) *VET Student Loans*

¹³ Victorian Registration and Qualifications Authority and the Training Accreditation Council Western Australia

1.4 Training and Education Training Package profile

There are six qualifications in the Training and Education Training Package (see Table 3).¹⁴ Of the 4.2 million learners enrolled in vocational education qualifications in 2016, almost **49,000 learners were enrolled in Training and Education Training Package, comprising 1.2 per cent of all learners.**¹⁵

The overwhelming majority of 2016 enrolments were in the Certificate IV in Training and Assessment, however, it is relevant to note that enrolments in the Certificate IV decreased by 21 per cent between 2015 and 2016. This likely reflects the release of the TAE16 Training Package in April 2016, regulatory change pertaining to required trainer/assessor credentials, and the decline in the number of training organisations and subsequent decrease in trainer and assessor job roles in the sector.

Table 3: TAE qualification engagement

Qualification	RTOs with scope*	Enrolments			2016 completions
		2015	2016	Per cent change	
Certificate IV in Training and Assessment	68	57,471	45,236	-21	25,651
Diploma of Vocational Education and Training	22	2,166	2,028	-6	849
Diploma of Training Design and Development	93	1,658	1,424	-14	647
Graduate Diploma of Adult Language, Literacy and Numeracy Practice	15	199	163	-18	22
Graduate Diploma of Adult Language, Literacy and Numeracy Leadership	5	12	12	0	1
Graduate Certificate in Digital Education	6	59	47	-20	9

Source: NCVER (2017) *Total VET Activity 2016*, Training.gov.au RTO Scope Reports

* RTO scope as of March 2018

Licensing, regulatory or industry standards issues

VET is often used to facilitate the completion of compulsory training to obtain a licence or meet certain regulatory requirements. Table 4 identifies licence or regulatory requirements that can be completed under the TAE Training Package; specifically, the *Standards for Registered Training Organisations (RTOs) 2015*. See ASQA, TAC and VRQA websites for more information on the regulatory requirements in different jurisdictions.

Table 4: Licence and regulatory requirements

Requirement	Purpose of requirement	Qualification/UoC
Trainer and assessor (general) requirements	Under clauses 1.13 – 1.16 of the <i>Standards for Registered Training Organisations (RTOs) 2015</i> , a trainer and assessor must have:	<ul style="list-style-type: none"> • Certificate IV in Training and Assessment • Diploma of Vocational Education and Training

¹⁴ Most recent Training Package is TAE release 2.1

¹⁵ National Centre for Vocational Education Statistics (2017) *Students and courses 2016*

Requirement	Purpose of requirement	Qualification/UoC
	<ol style="list-style-type: none"> 1. a Certificate IV in Training and Assessment or a Diploma or higher level qualification in adult education 2. the vocational competencies at least to the level being delivered and assessed (for example, if teaching Certificate III in Financial Services, the trainer and assessor must have completed a Certificate III in Financial Services or higher) 3. current industry skills directly relevant to the training provided. <p>Note that from 1 January 2016, it is no longer sufficient to demonstrate completion of equivalent competencies to those in the Certificate IV in Training and Assessment.</p> <p>Under clauses 1.13 – 1.16 of the Standards for Registered Training Organisations (RTOs) 2015, anyone who delivers assessment only, and does not provide training, must hold one or more of:</p> <ol style="list-style-type: none"> 1. TAESS00011 Assessor Skill Set 2. A Certificate IV in Training and Assessment or a diploma of higher level qualification in adult education. <p>Note that Standard 1.15 in Part of the 2015 Standards will be altered as of 31 March 2019.</p>	
<p>Trainer or assessor (specialising in TAE) requirements</p>	<p>Under clause 1.21-1.24 of the Standards for Registered Training Organisations (RTOs) 2015, a trainer and assessor specialising in the teaching of qualifications under the Training and Education Training Package must satisfy:</p> <ol style="list-style-type: none"> 1. the requirements in clauses 1.13-1.16 of the <i>Standards for Registered Training Organisations (RTOs) 2015</i> 2. have a Diploma of Vocational Education and Training, Diploma of Training Design and Development. <p>Where these requirements are not met, the trainer and assessor may deliver the course under supervision of a trainer and assessor that meets the clause 1.21-1.24 requirements, but may not assess the competencies of learners.</p>	<ul style="list-style-type: none"> • Diploma of Vocational Education and Training • Diploma of Training Design and Development
<p>Unqualified trainer and assessor requirements</p>	<p>Under clause 1.17-1.20, a trainer and assessor can deliver a course without holding a Certificate IV in Training and Assessment if they:</p> <ol style="list-style-type: none"> 1. are supervised by a trainer and assessor 2. hold one of the following skill sets – Enterprise Trainer – Mentoring, Enterprise Trainer – Presenting, Enterprise Trainer and Assessor 	<ul style="list-style-type: none"> • Enterprise Trainer – Mentoring skill set • Enterprise Trainer – Presenting skill set • Enterprise Trainer and Assessor skill set

Requirement	Purpose of requirement	Qualification/UoC
	<ol style="list-style-type: none"> 3. have vocational competencies at least to the level being delivered and assessed 4. have current industry skills directly relevant to the training and assessment being provided. <p>These practitioners cannot assess the competency of learners.</p>	

1.5 Challenges and opportunities

The views of businesses, learners and other key stakeholder in the VET sector are critical to our understanding of skills needs in the workforce. Our approach to training product review is centred on this feedback and their views of the challenges and opportunities in their sector and sub-sectors. Table 5 identifies some of the key stakeholders relevant to the sector.

Table 5: Stakeholders in the Vocational Education and Training sector

Stakeholder groups	Key stakeholders
Training Product Development	<ul style="list-style-type: none"> • Australian Industry Skills Committee (AISC) • Education Industry Reference Committee • Other Industry Reference Committees (IRCs)
Government	<ul style="list-style-type: none"> • Australian Skills Quality Authority (ASQA) • Training Accreditation Council Western Australia (TAC) • Victorian Registration and Qualifications Authority (VRQA) • Federal, State and Territory Departments
Employee representatives	<ul style="list-style-type: none"> • TAFE Directors Australia • Unions
Employer representatives	<ul style="list-style-type: none"> • Australian Council for Private Education and Training • TAFE Directors Australia • Enterprise RTO Association • Business Council of Australia • Australian Chamber of Commerce and Industry • Australian Industry Group • Other industry groups
Registered Training Organisations (RTOs)	<ul style="list-style-type: none"> • Technical and Further Education institutions (TAFEs) • Private and community RTOs • Enterprise RTOs • Schools and universities
Workers	<ul style="list-style-type: none"> • Managers and directors • VET teachers and practitioners (VET and enterprise) • Industry experts and other casually engaged workers • Other VET workers
Learners	<ul style="list-style-type: none"> • Domestic learners • International learners

Our initial views on the challenges and opportunities faced by employers and learners are drawn from research, surveys and interviews by the SSO and IRC. In addition to face-to-face consultation and research, we will

continue to verify and expand the views presented below through wide consultation with industry, employers and learners in our development of cases for change and other ongoing work.

Employer challenges and opportunities

Drawing from existing employer surveys, such as the NCVER (2017) *Survey of Employers' Use and View of the VET system 2017*, and ongoing consultation with industry, we are hearing two key messages from employers in the training and education sector:

- **Better alignment between VET and employer needs is required.**
- **Regulation, changing consumer preferences and digital disruption are the key trends impacting organisations.**

Better alignment between VET and employer needs is required

Stakeholders commented that more could be done to better align vocational education with employer and industry needs. Key areas noted for improvement include:

- Better signalling of quality and a shared understanding of employers, learners and VET practitioners as to what good quality VET involves in each subsector.
- Delivery of materials to fill subject matter gaps. Stakeholders reported that Training Package content was needed to facilitate learning in 'new and emerging technologies', 'compliance management, learning analytics, computer supported learning', 'basic modern business skills such as use of Microsoft suite' and managerial skills.

The need for greater alignment between vocational education and VET job roles is highlighted by the amount of employers that utilise informal training. Although it is noted that a degree of informal training is required in all occupations (for example, organisational specific policies or induction training), employers are perceiving gaps in training that the VET sector can provide, and are filling these with informal training. Indeed, in 2017, 82.2 per cent of surveyed training and education employers utilised informal training in the last 12 months, a slight increase from 81.3 per cent in 2015.¹⁶

Regulation, changing consumer preferences and digital disruption will have the highest impact on their businesses

Stakeholders that hire training and education workers identified the following trends as having the greatest impact on future worker skill needs:

- 1 regulation or government policy
- 2 changing consumer patterns
- 3 innovation and disruptive technologies.

These responses align with the industry trends identified in Section C below. Given these drivers of change, it is unsurprising that stakeholders identified digital competence and adaptability as some of the most important future skills needs.

Learner challenges and opportunities

To give learners the best possible opportunity to gain fulfilling jobs now and into the future, we need to understand the outcomes learners receive from training.

¹⁶ National Centre for Vocational Education Research (2017) *Survey of Employers' Use and View of the VET system 2017*, Table 8, *Use of training in the last 12 months by employer characteristics, 2015 and 2017 (%)*, Education and Training

A typical learner enrolled in the TAE Training Package is:

- **Older than average.** Learners aged 40 and over comprised 54 per cent of enrollees in 2016, compared to an average of 25 per cent across all Training Packages.¹⁷ The average age of TAE VET learners has increased since 2014, likely reflective of an ageing workforce. Since the requirements to be a trainer and assessor mandate industry knowledge, learners are typically older as they have studied industry specific qualifications, entered into their industry for a number of years, and then enrolled to become vocational education trainers in their specific field.
- **Studying part-time.** Approximately 96 per cent of Training and Education learners were enrolled part time, compared to approximately 82 per cent of all VET learners.¹⁸ This is consistent with previous years.

A typical graduate from a qualification in the TAE Training Package is:

- **More likely to be employed.** Over 93.2 per cent of Training and Education graduates were employed within 6 months of training, compared to 77.7 per cent of all graduates. The majority of Training and Education graduates are employed before training and need to have already completed additional qualifications before becoming a qualified VET teacher or practitioner, making employment outcomes stronger than in other sectors – see Figure 4 which highlights the strong employment outcomes of those employed before training.¹⁹
- **Working in the education and training industry.** 36 per cent of Training and Education graduates were employed in the education and training sector after graduation, with an additional 18 per cent employed in the health care and social assistance sector.²⁰ This may be because graduates work as a trainer and assessor within an enterprise, or work casually as a VET teacher or practitioner in an RTO, with their main occupation being outside the sector.
- **Earning a higher salary.** The average Training and Education graduate earns a full time salary of \$75,100 per annum within the first 6 months of completing training, compared to \$55,000 across the VET sector.²¹

¹⁷ National Centre for Vocational Education Statistics (2018) *Students and courses 2016*

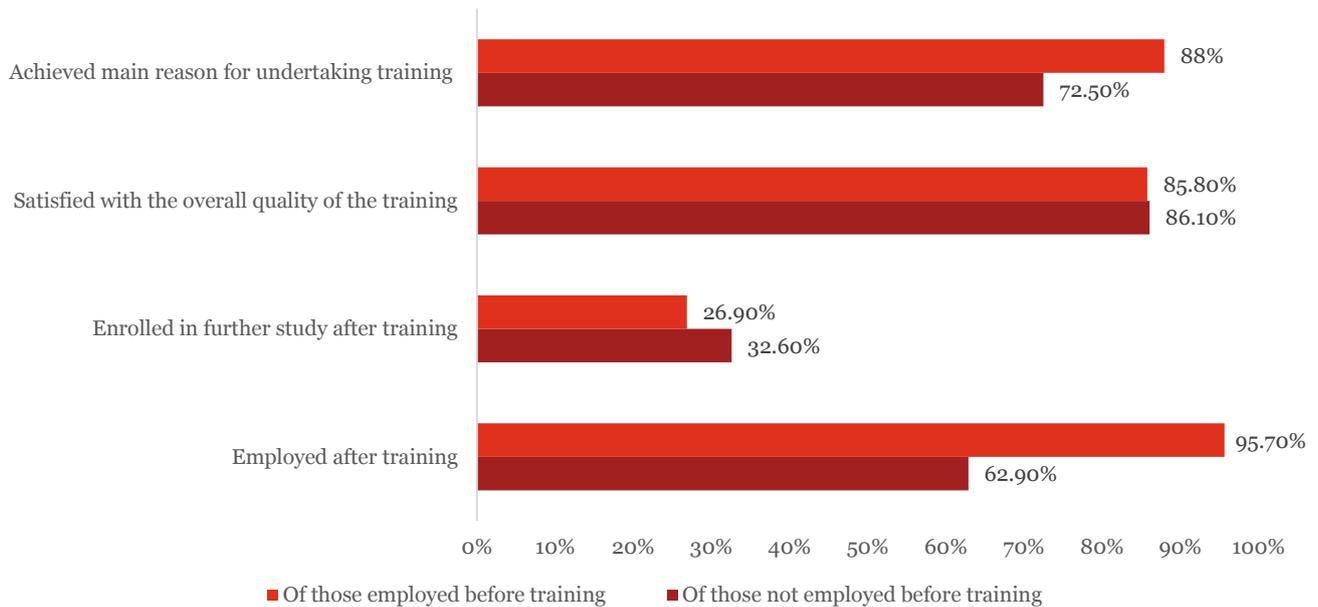
¹⁸ National Centre for Vocational Education Statistics (2018) *Students and courses 2016*

¹⁹ National Centre for Vocational Education Research, *VET graduate outcomes 2016*

²⁰ National Centre for Vocational Education Research, *VET graduate outcomes 2016*

²¹ National Centre for Vocational Education Research, *VET graduate outcomes 2016*

Figure 4: TAE graduate satisfaction with training



Source: NCVER (2016), *VET Graduate Outcomes Survey 2016*

Opportunities for collaboration on training development across industry sectors

Training Packages are not always developed in a way that recognises the importance of skills in multiple sectors and which can be used to their full potential in various industry contexts. The AISC has identified several cross sector skill areas where opportunities exist to create flexible and transferable package components that will benefit industry, learners and the broader VET sector.

PwC's Skills for Australia has been commissioned to develop Training Package components that address skill needs across industries in four cross sector skill areas: Cyber Security, Big Data, Teamwork and Communication, and Inclusion of People with Disability in VET. The expected outcomes of these cross sector projects include:

- significant reduction in the level of duplication across the national training system
- better support for individuals to move between related occupations
- improved flexibility and efficiency in Australia's VET system.

Table 6 below identifies opportunities for linkages between existing cross sector project work and the TAE Training Package.

Table 6: Training development opportunities across industry sectors

Cross sector project	Project scope	Link to TAE Training Package
Automation	Identify related skill and knowledge needs in automated processes and the use of robotics, drones and remote operations systems shared by multiple industry sectors.	Currently no identified overlap, however, any products developed will be relevant to VET teachers and practitioners engaging in sectors in which automation capabilities are required or are emerging. For example, but not limited to, the Resources and Infrastructure Industry

Cross sector project	Project scope	Link to TAE Training Package
		Training Package and the Automotive Retail, Service and Repair Training Package.
Big Data	Identify related skill and knowledge needs in data management, data analytics and data driven decision-making that apply across multiple industries.	Currently no identified overlap, however, any products developed will be relevant to VET teachers and practitioners engaging in sectors in which data capabilities are required or are emerging. For example, but not limited to, the Financial Services Training Package.
Cyber Security	Identify related skill and knowledge needs in information security, data protection and privacy shared by multiple industry sectors.	Currently no identified overlap, however, any products developed will be relevant to VET teachers and practitioners engaging in sectors in which cyber security capabilities are required or are emerging. For example, but not limited to, the Information and Communications Technology Training Package.
Consumer Engagement through Online and Social Media	Identify related skill and knowledge needs in cultural awareness, customer service, marketing, communication and social media skills shared by multiple industry sectors.	May impact the TAE Training Package due to the growing use of online platforms and digital technology to provide training and engage learners. There may be options for synergies between any cross-sector developments and the unit TAELED801 Design pedagogy for e-learning.
Digital Skills	Identify related skill and knowledge needs in digital literacy, 3D printing/additive manufacturing and coding skills that apply across multiple industries.	May impact the TAE Training Package due to the growing demand for VET teachers and practitioners to have enhanced digital skills. Digital literacy is critical across all industries, thus it will be essential for VET teachers to have baseline capabilities. Additionally, trainers engaging in digital specific industries will require in depth capabilities.
Environmental Sustainability	Identify related skill and knowledge needs in environmentally friendly products, manufacturing and waste processes, and sustainable energy production that apply across multiple industries.	May affect the structure of skill sets such as TAESS00016 Sustainable Practice Skill Set and units, including, TAESUS501 Analyse and apply sustainability skills to learning programs, and TAESUS502 Identify and apply current sustainability education principles and practice to learning programs.
Inclusion of People with Disability in VET	Develop Training Package components that can be used by multiple industries to build the capability of VET educators and employers to foster greater inclusion of people with disability in vocational education and training, employment, and customer service contexts.	There is likely to be a significant overlap with this project as initial findings, corroborated by IRC Member testimony, is that there is a need for VET teachers to have enhanced skills to meet individual learner needs, including learners with disability. Potential for units relating to meeting individual learner needs, as well as a skill set specialising in training delivery to learners with disability, to be incorporated into the TAE Training Package.
Supply Chain	Identify related skill and knowledge needs in traditional supply chain management practices as enabling	Currently no identified overlap, however, any products developed will be relevant to VET teachers and practitioners engaging in sectors in which supply chain capabilities are required

Cross sector project	Project scope	Link to TAE Training Package
	services for the economy that apply across multiple industry sectors.	or are emerging. For example, but not limited to, the Transport and Logistics Training Package.
Teamwork and Communication	Develop common teamwork and communication units that address common skill and knowledge needs and can be contextualised across multiple industries.	Teamwork and communication skills are taught across all industries and Training Packages. Therefore, all VET teachers and practitioners will engage with pre-existing units and future iterations. Movement towards common units will assist in ensuring consistency of training, but will require the trainer to nuance the training to the specific sector in which they are teaching.

Opportunities for future collaboration on Training Package development across industry sectors

Industry consultation has identified a number of potential cross sector skill and capability areas, relevant for future workers in the education and training sector and also more broadly applicable across multiple industry sectors. These present opportunities for future collaboration on Training Package development, improved flexibility, and enhancing occupational mobility for learners. Although not an exhaustive list of potential cross sector skill and capability areas, these include:

- Resilience skills:** With evolving workplace environments and changing job roles in the sector, resilience skills will be critical to maintaining a product VET workforce. Workers will be required to continually innovate to meet individual learner needs, problem solve to deal with changing environments, and adapt to new workplace needs. Workers with resilience skills will be demanded in these environments. Resilience skills also have broader applicability to other industry sectors, including: agriculture and farming (e.g., where farmers need to cope with the seasonality pressures on their crops); community services (e.g., where workers need to bounce back from emotionally challenging situations and outcomes); emergency services (e.g., where first responders continually face threats to personal safety); and business services (e.g., where workforce managers need to bounce back from stressful management challenges).
- Adaptability and flexibility skills:** Given the changing composition of the Australian economy and industries, workers in the sector will need to be flexible to meet changing demand trends for training and assessment. For example, the growing service economy will necessitate skilled workers in new and emerging job roles. This will counter the diminishing need for trained workers in industries, such as manufacturing. Such skills will have broader applicability to other industry sectors; as noted in PwC's 'Workforce of the future report', '...adaptability - in organisations, individuals and society - is essential for navigating the changes ahead'.²² Thus, skills of this nature will be broadly applicable across occupations and industries.
- Professional and ethical practice skills:** Stakeholder commentary has indicated that there are some facets of the sector that may benefit from an increased focus on professionalisation and the development of and adherence to professional and ethical standards would assist in this area. Skills in professional and ethical practice, and complying with legislative and regulatory requirements, enable practitioners to deliver better quality outcomes for learners and for the VET system as a whole. Professional and ethical practice skills also have broader applicability to other industry sectors, including: financial services (e.g., to follow professional and ethical guidelines in the delivery of financial services and products); child care and support (e.g., to comply with legal responsibilities regarding working with children and following proper escalation procedures); and food and beverage (e.g., to adhere to food safety standards and uphold company values and principles).

²² PwC (2017), *Workforce of the future: The competing forces shaping 2030*, p 31

2 Employment and Skills Outlook

The purpose of this section is to provide a broad overview of the magnitude and growth of employment in the VET sector, and to discuss the factors which are likely to influence the supply of VET graduates to fill these positions. This information helps us to understand the health of the employment market for Training and Education graduates, allowing us to draw implications for skills needs and Training Package development.

2.1 Industry employment outlook

As mentioned previously, commentary suggests there is a diverse range of workers who gain qualifications in the TAE Training Package. Following completion of training, TAE learners are not necessarily directly involved with or employed by RTOs and may not describe their job role as a VET teacher or practitioner. This will likely result from training only comprising a small portion of their job role. As such, it is difficult to articulate the size of the VET teacher and practitioner workforce. Analysis here focuses upon those workers that work directly within RTOs, however, it must be acknowledged that a significant number of occupations outside of the ‘Vocational Education Teacher’ classification undertake training and assessment functions. For example, an individual whose primary job role is to be a mechanic may also carry out training within the business with which they work. This divergence of tasks within job roles and difficulty quantifying holistic employment levels is likely to be exacerbated by the requirement that practitioners retain currency in their field of expertise, with workers designating their area of expertise as their primary occupation.

The employment landscape can be analysed at the occupation level (classified by the Australian Bureau of Statistics under ANZSCO).²³ All qualifications in the Training and Education Training Package (TAE release 2.1) are mapped to the ANZSCO category of Vocational Education Teachers,²⁴ defined as ‘teaching at a vocational education institution’, with specialisations including adult education teacher, TAFE lecturer, TAFE teacher and workplace trainer and assessor.

Due to this narrow mapping of qualifications to occupations, our analysis of occupational level data is limited in that we have not been asked to consider employment growth for managers/directors of RTOs, curriculum and training designers and several other VET professionals that use the TAE Training Package to attain their requisite skills. Despite this limitation, it is our view that the factors driving employment demand for Vocational Education Teachers (for example, international learner growth and reskilling requirements) are likely to have a similar impact on occupations that fall outside the definition of a Vocational Education Teacher, making this analysis broadly relevant to all roles in the sector. Please note that, as with any empirical analysis of employment, there are limitations in the representativeness of employment data.

Table 7: Projected employment levels for vocational education teacher occupations

Occupation	Employment level May 2017 (‘000s)	Projected Employment level May 2022 (‘000s)	Projected employment growth - five years to May 2022 (per cent)
Vocational Education Teachers	26.3	28.0	+6.3

Source: Department of Jobs and Small Business (2017). 2017 Occupational Projections – five years to May 2022

Note 1: the occupations displayed in the above table are identified as the most relevant occupations to the vocational training and education sector, and do not represent all occupations in the sector

²³ Australian Bureau of Statistics (2006) *Australian and New Zealand Standard Classification of Occupations* Cat. No. 1220.0 (2006)

²⁴ NCVER has mapped vocational education qualifications to ANZSCO categories to allow for consistent analysis between NCVER and ABS data

In summary, the employment outlook for the education and training sector is positive. However, when considering vocational education and training specifically, the employment landscape is more uncertain. Whilst the VET sector is benefitting from the broader trends of population growth, demand for reskilling and strong international learner numbers, recent and continuing regulatory change in VET are likely to weigh on employment growth in the sector.

Please note that there are limitations with this data. Occupation level employment is inherently difficult to project forward, especially for small numbers of workers where unforeseen shocks (e.g. closure of a major RTO) could skew the data. Further, trends affecting the sector are having opposing impacts, as noted above.

2.2 Supply side challenges and opportunities

An important consideration in determining the magnitude and growth of employment in the VET sector is the supply of graduates trained for work in the sector. Whilst the number of jobs available for workers is likely to grow, a full understanding of the future industry direction should also consider how employment demand will be met. This requires an understanding of the factors which are likely to influence the decisions of learners to enrol in Training and Education training and then stay working in the sector. Table 8 lists some of the factors which may influence the decision of workers to undertake VET and enter a VET sector role.

On the whole, the supply side reasons to enter the VET sector are positive, with qualified VET teachers and practitioners paid more than other graduates and generally privy to good working conditions. It is acknowledged that not all occupation and education decisions are made on a rational basis and it can be inherently difficult for an individual to weigh up these long term factors. As such, emotion and perception are likely to play a large part in the career decisions of workers, rather than explicit analysis of the factors listed in Table 8.²⁵

Table 8: Supply side challenges and opportunities

Supply side influence	Details
Wages	In 2017, Training and Education VET graduates received an average annual salary of \$75,100, after graduation, compared to an average of \$55,000 for all VET graduates. ²⁶ This is likely reflective of the high level of industry experience in their field of expertise possessed by most workers prior to joining the sector. The relatively high wages represent an opportunity for the sector.
Working conditions	Workers in the VET sector tend to have good working conditions, especially in institutions with strong industrial relations agreements. The VET workforce is also made up of a high proportion of casual and part-time employment. Depending on the preferences of individual employees, this may act as an incentive or disincentive. ²⁷ Good working conditions may represent an opportunity to attract workers.
Lateral movement	Movement into teaching other forms of education and training usually requires an additional teaching qualification. However, VET professionals usually have a qualification in the discipline they teach, giving them scope to move (back) into that industry. Once in a teaching position, VET practitioners tend to be highly mobile and able to easily move between organisations. ²⁸

²⁵ Jim Bright, Robert Pryor, Sharon Wilkenfeld, & Joanna Earl (2005) - *The Role of Social Context and Serendipitous Events in Career Decision Making* - International Journal for Educational and Vocational Guidance Vol 5 (1): 19-36

²⁶ National Centre for Vocational Education Research (2017) *Total VET graduate outcomes, salaries and jobs*

²⁷ Productivity Commission (2011) *Review of the VET Workforce*. Note: A highly casualised workforce was found in 2011, anecdotal evidence suggests that this remains the case.

²⁸ Productivity Commission (2011) *Review of the VET Workforce*

Supply side influence	Details
	<p>Anecdotal evidence also suggests that many TAE qualification holders do not work directly in the VET sector. Rather, graduates use the qualification to build skills which can be applied in a diverse range of jobs. Further research is needed to understand why people not intending to work in the VET sector gain TAE qualifications and how they use these qualifications.</p> <p>Flexibility and lateral movement represents an opportunity to attract workers.</p>
Funding	<p>Funding differs on a state and territory basis. This can influence both the decision to enrol, and where to enrol, and can impact learners in different ways depending on their vocational training industry. In addition to the Commonwealth Government’s VET Student Loans program, most state and territory governments offer subsidies to learners depending on various eligibility requirements such as social disadvantage, past educational attainment or specific levels of qualifications. However, particular qualifications in some states and territories may be eligible for higher rates of subsidy or other concessional treatment as a part of ‘priority skills’ programs.</p> <p>The availability of subsidies represents an opportunity to build a highly skilled workforce in the sector. A challenge to the sector may be represented where there is regulatory uncertainty or cuts to funding.</p>

This section summarised the factors influencing the supply and demand of jobs in the VET sector. We also note that having the right number of people entering the labour market for certain occupations is different to those people having the right, future fit, skills. The following section analyses the trends affecting these potential workers and how training can ensure this supply of workers is skilled correctly to meet future demand.

2.3 Trends shaping the sector

This section outlines **four key trends** shaping the VET workforce over the medium to long term.

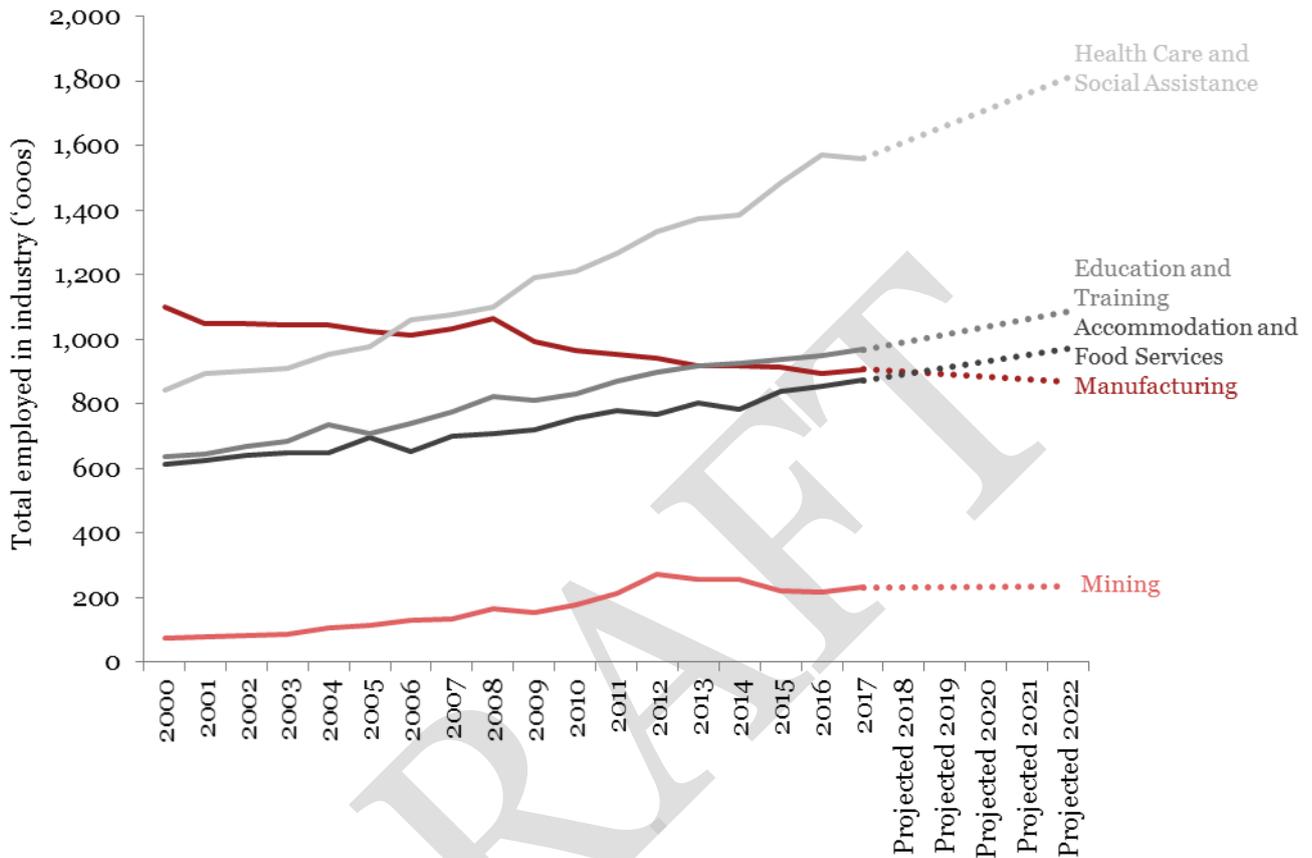
- 01
Structural changes to industries and workplaces
- 02
Technological change
- 03
Vocational education reform
- 04
Changing learner cohort

1 Structural changes to industries and workplaces

After a number of decades of economic growth and prosperity on the back of the resources-boom, the Australian economy is adjusting to new demand trends. A rebalancing is taking place, with the dominance of

the mining and manufacturing sectors being replaced by service and knowledge industries, such as health care and education - see Figure 5.

Figure 5: Projected growth in selected Australian industries



Source: ABS, Labour Force, Australia, Detailed, Quarterly, November 2017, Catalogue 6291.0.55.003. Department of Education and Training, Employment Projections to May 2022 <<http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections>>

Note 1: Employment levels based on levels in May of each year

This rebalancing will be reflected in the skills demanded in the labour market. Analysis by AlphaBeta found that appropriately skilling the additional 6.2 million people that will enter the Australian workforce by 2030 and ensuring they are skilled to perform high value tasks could result in economic gains of \$600 billion by 2030.²⁹ Therefore, the economic implications of accurate workforce skilling are critical to Australia’s future prosperity.

‘How we work and the jobs we do are significantly changing; Australia’s economic stability is reliant on our ability to rapidly adapt to this disruption and provide the skills needed’.

CEDA report, VET: Securing Skills for Growth, Foreword by CEDA Chief Executive Professor the Hon. Stephen Martin pg 5

²⁹ AlphaBeta, *The Automation Advantage*, p 27, see <<http://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>>

Key structural and workforce changes include:

- **Automation changing the composition of job roles across industries.** There has been substantial discussion in recent years regarding the impact of automation on the workforce and Industry 4.0. A 2015 report by CEDA estimated that up to 40 per cent of Australian jobs – approximately 5 million – are at high risk of being replaced by computers within 15 years.³⁰ In this environment, it is predicted that jobs that are routine are the most likely to be at risk of automation, whereas non-routine jobs that require creativity and human interaction will be less at risk. As noted by the Head of Economics Analysis Department at the Reserve Bank of Australia, ‘...non-routine jobs have become steadily more important. These jobs tend to be more difficult to automate’.³¹ However, some reports predict that automation will augment, rather than replace, human job roles.³² Modelling by AlphaBeta suggested that ‘only 29 per cent of the automation driven workplace change will involve workers changing job roles’, and that, on the whole, workers will stay in their jobs, but that the parameters of tasks within a job role may change. Under this analysis, job roles are less likely to disappear, rather, certain activities within job roles will change with workers gaining additional time for other duties through the automation of routine and manual tasks.
- **Contraction of job roles and workplaces in some industries.** As has already been seen in the light vehicle manufacturing space with the end of manufacturing activities by Holden, Ford and Toyota in Australian jurisdictions, some jobs will disappear in response to industry decline (as above, these are likely to be ‘routine’ jobs). Workers in these industries will be required to gain employment in other sectors and may require reskilling to do this.
- **Workplaces and job roles increasingly becoming flexible.** Rather than workers filling a specific, permanent job role, an emerging trend is for workers to contract their skills directly to the market, a practice commonly referred to as the ‘gig’ economy.³³ Whilst this process facilitates a flexible and mobile workforce that can react to emerging demand trends, it carries the risk of a casualised workforce that does not have the same stability as in the past. This flexibility is increasingly reflected across the workforce as a whole, with movements towards flexible roles and workplaces common throughout industries.
- **The link between upskilling and income growth.** Australia is in a period of subdued wage growth as the movement away from a resource driven economy is removing labour market pressure from mining and related industries.³⁴ Subdued wage growth is expected to continue over the medium term, requiring individuals to enhance their employability through education to earn more money.
- **Emerging growth industries.** Growth in services exports (education and tourism), health services, and some professional services (notably finance and Information and Communications Technology (ICT)) will mean that many new students will need to be trained to work in these industries.

In this environment of change it will be critical to ensure learners and workers are prepared for careers, rather than for a single job role, and that they have the right skills to take advantage of emerging opportunities.³⁵ The VET sector has a critical role to play in enabling this training and ensuring that learners and workers are prepared for future industries and occupations. Additionally, it will be critical that the VET teacher and

³⁰ CEDA (2015), *Australia’s Future Workforce*, p 6

³¹ Alexandra Heath (2016), *The Changing Nature of the Australian Workforce*, CEDA – Future Skills: The Education and Training Pipeline

³² See: AlphaBeta, *The Automation Advantage*, p 27, < <http://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>>

³³ Microsoft Australia (2018), *Building Australia’s future-ready workforce*, p 11, < <https://msenterprise.global.ssl.fastly.net/wordpress/2018/02/Building-Australias-Future-Ready-Workforce.pdf>>

³⁴ Wages increased by 2.2 per cent in the year ending December 2015, compared to an average yearly growth of 3.6 per cent over the past 10 years. ABS (Dec 2015) *Wage Price Index, Catalogue 6345.0*

³⁵ Microsoft Australia (2018), *Building Australia’s future-ready workforce*, p 16, < <https://msenterprise.global.ssl.fastly.net/wordpress/2018/02/Building-Australias-Future-Ready-Workforce.pdf>>

practitioner workforce continues to upskill and seek professional development in order to retain currency in an industry responding to broader changes.

What does this mean for the VET workforce?

Job demand	<ul style="list-style-type: none">• Increased demand for VET teachers and practitioners in growth industries.• Reduced demand for VET teachers and practitioners in slowing industries.• Specialist job roles with workers contracting to the market.
Skills needs	<ul style="list-style-type: none">• Capacity to adapt to changing demand trends.• Emphasis on creativity and problem solving skills.• Ability to teach 'employability skills' applicable to all industries, such as strong communication and ICT proficiency, as well as industry specific skills.³⁶

2 Technological advances

Technological developments are rapidly changing the structure of Australian industries and disrupting job roles and skill requirements. As noted by Professor the Hon. Stephen Martin, Chief Executive of CEDA, 'Technology is going to dramatically reshape our workforce in coming years and the nation's ability to rapidly adapt to technological change, and even more importantly, innovate, will be paramount for job creation and our future economic success'.³⁷

In the VET sector, the impact of new and emerging technology is dual faceted. Technological developments are impacting how vocational education material is delivered, thereby impacting the necessary skill requirements of trainers and assessors, whilst simultaneously impacting the content of vocational training.

Modes of delivery

Digital platforms are increasingly utilised in the VET setting to train learners. This is seen through the use of tools such as online assessments and learning materials. E-learning is already widely adopted in the vocational education sector and new formats are continuing to emerge. In particular, a new form of education delivery has emerged in the US to cater for technological change in job roles and the capacity to reach learners via online platforms. Known as 'nanodegrees',³⁸ they are short, online courses that focus on skills for changing work environments, such as programming and STEM skills. The courses are easily adaptable to current skill needs and studies have suggested that 'digital badges' of this nature are increasingly recognised as an asset by employers.³⁹

The above mechanisms are transforming the way teachers and practitioners engage with learners and the skill requirements and parameters of the vocational teacher and practitioner job role. Indeed, the use of technology to deliver course content requires VET teachers and practitioners to be digitally literate. The demand for flexibility and use of technology in VET is furthered by the need for training to address skills shortages in rural Australia. Therefore, in addition to the traditional capabilities required of teachers and practitioners, including assessing competence and designing learning programs, workers in the field are required to understand and utilise digital tools and platforms for teaching. As technology continues to evolve, VET teachers and practitioners will need to adopt continuous learning strategies in order to maintain digital skill currency.

³⁶ See Leesa Wheelahan and Gavin Moodie (2011) *Rethinking Vocational Education and Training: From Competencies to Capabilities*, a paper for the New South Wales Board of Vocational Education and Training

³⁷ CEDA (2015), *Future Workforce Report*, p 6

³⁸ Commonly referred to in Australia as micro-credentials

³⁹ AlphaBeta, *The Automation Advantage*, p 32, < <http://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>>

Increased technological training content

Technological change and increased digital content will not only necessitate that VET teachers and practitioners have digital fluency, but that they can teach digital skills as part of a variety of industry specific training. A 2018 report by Microsoft noted that ‘digital skills are the fastest growing proficiencies sought by Australian employers’ and that ‘about 90 per cent of jobs today require basic digital skills such as sending emails, finding information on the internet and using a word processor’.⁴⁰ With these changing job roles, there is a growing demand for learners to be taught digital and technology-based skills in the VET environment and it will be critical that VET teachers and practitioners have the appropriate skills to train learners. Not all VET teachers will be required to be digital experts, however, baseline digital capabilities will be required as, whilst there will be a growing demand for specialist ICT professionals and teachers to train them, the general workforce will similarly need digital skills. Thus, VET practitioner digital skills will be critical.

What does this mean for the VET workforce?

Job demand	<ul style="list-style-type: none">• High demand for VET teachers and practitioners with industry experience in ICT.• Increased demand for VET teachers and practitioners in science, maths, engineering and technology related industries.
Skills needs	<ul style="list-style-type: none">• Digital fluency of VET teachers and practitioners and continuous learning strategies to maintain digital currency.• Numeracy and computational skills of VET teachers and practitioners, as these skills provide a foundation for the attainment of digital fluency and other STEM skills.• Strong communication skills to articulate training and assessment via digital platforms, as opposed to the traditional verbal format.• Ability to deliver materials through e-learning and to assess online learning. Includes ability to make resources and assessments available online, deliver training sessions online and facilitate a collaborative online learning environment.• Ability to teach basic digital skills as a part of industry specific training.• Proficiency in designing and delivering professional development opportunities. This is a skills need for managers so that VET teachers and practitioners can continue to hone their digital skills.

3 Vocational education reform

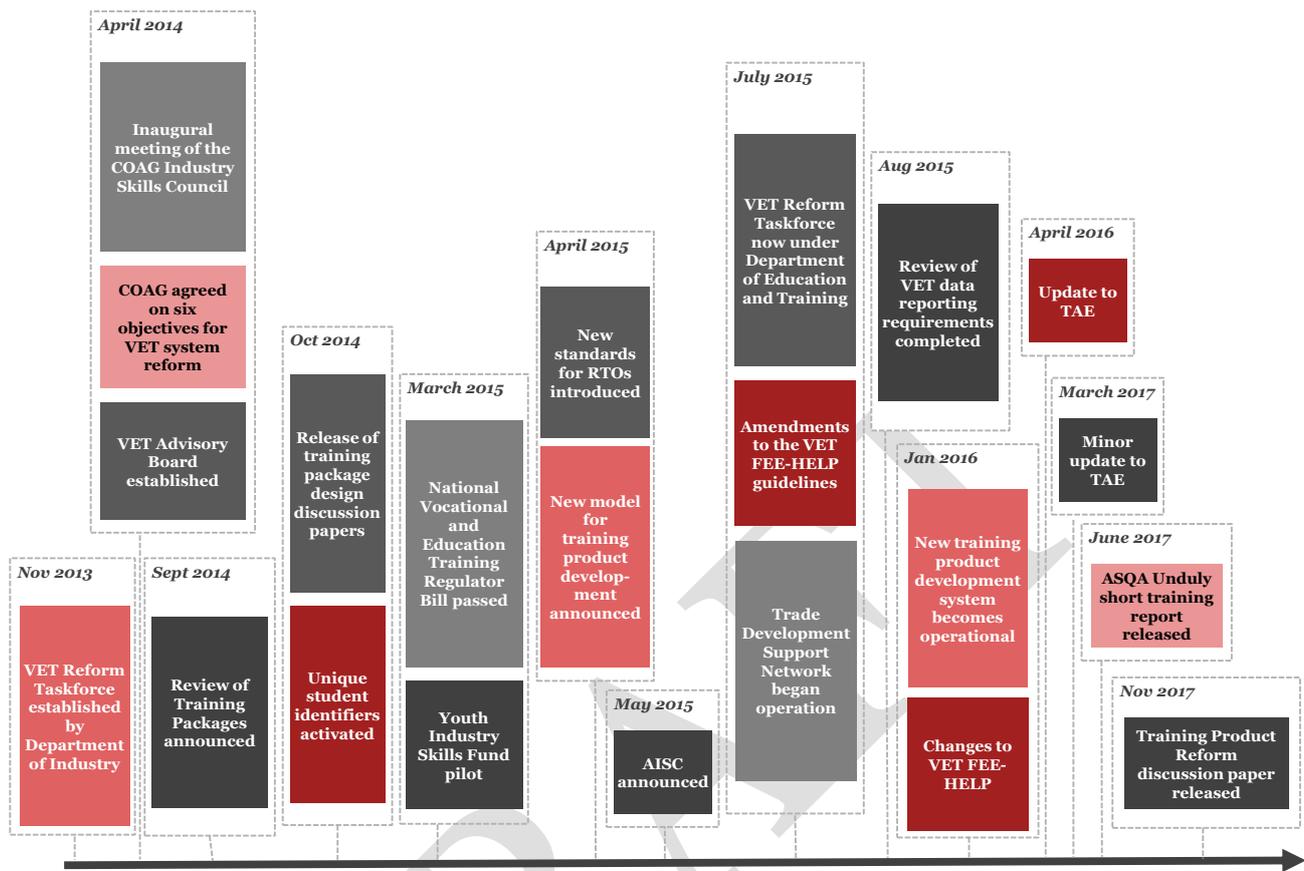
The regulatory and policy environment pertaining to the VET sector is complicated, with numerous layers of State and Federal regulation and standards. This creates a complex operating environment for organisations as well as individual teachers and practitioners who must stay abreast of varying requirements. Additionally, as outlined in Figure 6, the sector has been subject to persistent reform to ‘improve the quality, job outcomes and status of VET’.⁴¹ Despite this significant reform agenda, of note is that, to date, the VET sector has not been subject to a wholesale, national review, like the Gonski Report for the schools sector and Bradley Review for higher education.⁴²

⁴⁰ Microsoft Australia (2018), *Building Australia's future-ready workforce*, p 25, <<https://msenterprise.global.ssl.fastly.net/wordpress/2018/02/Building-Australias-Future-Ready-Workforce.pdf>>

⁴¹ Australian Government, Department of Education and Training, *Vocational Education and Training Reform* website <<https://www.education.gov.au/vocational-education-and-training-reform>>

⁴² CEDA (2016), *VET: Securing Skills for Growth*, p 23, <<https://www.ceda.com.au/Research-and-policy/All-CEDA-research/Research-catalogue/VET-skills-for-growth>>

Figure 6: Vocational Education Reform Timeline



Source: Department of Education and Training, Vocational education reform website <<https://www.education.gov.au/vocational-education-and-training-reform>>

Some of the reforms relate directly to teachers and practitioners, such as the review of *Quality of assessment in vocational education and training*; a review that was driven by concern that sub-standard assessment in VET is producing poor graduates. However, in addition to this, many government regulations and initiatives have an impact, whether direct or indirect, on the vocational education sector and, subsequently, the VET workforce. Examples of regulations and initiatives that are likely to have an impact include: education funding for mature aged workers under the National Workforce Development Fund; initiatives to reskill workers in declining industries, such as the Skills and Training Initiative to transition light vehicle manufacturing workers into new jobs; funding behind the Skills for Education and Employment (SEE) program; and the rollout of the National Disability Insurance Scheme (NDIS), which will create demand for training for new entrants to the sector and existing workers looking to up-skill or specialise.⁴³

This constant cycle of reform, explicitly within the ambit of the TAE Training Package as well as more broadly, can impact VET practitioner learners and workers. This includes:

- **Uncertainty of job roles.** Learners may be deterred from entering the industry as they are unsure of the parameters of job roles within the sector, as well as career progression opportunities and pathways.
- **Job security.** Existing workers may leave the sector if they are unable or do not want to maintain currency in accordance with new and emerging standards. This is supported by IRC testimony that there is likely to be

⁴³ National Disability Insurance Agency *Market Position Statements* <https://www.ndis.gov.au/document/nsw-market-position-statement> (accessed 21 August 2016)

a decrease in workers in the sector as of April 2019 when the ‘teach-out’ period for the additional assessment credential requirements within the TAE40116 expires.

- **Diminishing teacher and practitioner quality.** As RTOs focus resources and funds on meeting regulatory requirements, the capacity to support and enhance teacher quality may be diminished.
- **Continuous upskilling.** VET teachers and practitioners will need to adopt practices of lifelong learning and upskilling to ensure they stay up to date with changing regulatory and skill requirements.

What does this mean for the VET workforce?

Job demand	<ul style="list-style-type: none"> • High demand for assessors undertaking independent or external validation of assessment, if third party or pre-enrolment assessment of VET learners is required. • Reduced demand across the VET workforce if regulatory restrictions reduce the number of RTOs, and therefore reduce the number of VET teachers and practitioners needed in the sector. However, it is noted that regulatory reforms may not have a strong influence upon VET teachers and practitioners who are already appropriately skilled, qualified and continue to develop their skills.
Skills needs	<ul style="list-style-type: none"> • VET teachers and practitioners must ensure their assessment skills keep in line with regulatory standards. • Adaptability skills to meet changes and continue delivering high quality training. • Managers and directors must be equipped to understand and implement regulatory changes. • Managers and directors will need to be skilled in the planning of continuing professional development materials, and VET practitioners in their delivery, especially to ensure VET teachers and practitioners understand how to be compliant following a regulatory change.

4 Learner cohort changes

The VET learner cohort is changing with a more diverse learner group than in the past. The broad engagement of society in VET demonstrates a positive recognition of the value VET provides to learners, workers and industries. However, the diversification of learners has implications for VET teachers and practitioners who are required to meet a wide array of learner needs. This can pose challenges for trainers that are seeking to meet a range of individual learner needs in a common environment. Indeed, as noted in a 2017 OECD Skills Study, ‘Australian post-secondary VET is inclusive and caters to a very diverse population. Whilst this is a strength, it can be challenging to address the needs of a very diverse population’.⁴⁴

Key trends that are changing the composition and characteristics of the VET learner cohort are outlined below.

- **International learner growth.** Education is a key Australian services export, with 766,483 international learner enrolments in 2017. 27 per cent of these learners, 205,423, were enrolled in VET, up 16 per cent from 2016.⁴⁵ These figures make VET the fastest growing education sector, with Higher Education enrolment numbers growing by 15 per cent between 2016 and 2017.⁴⁶ Demand for vocational education from our international neighbours is expected to grow in the coming years, with the growing Asian middle class

⁴⁴ OECD (2017), *Building Skills for All in Australia: Policy Insights from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, p 15

⁴⁵ Department of Education (2017) *International Student Data* <https://internationaleducation.gov.au/research/International-Student-Data/Documents/MONTHLY%20SUMMARIES/2017/Oct%202017%20MonthlyInfographic.pdf>

⁴⁶ Department of Education (2017) *International Student Data* <https://internationaleducation.gov.au/research/International-Student-Data/Documents/MONTHLY%20SUMMARIES/2017/Oct%202017%20MonthlyInfographic.pdf>

driving education consumption and the quality and reputation of the Australian VET system internationally.⁴⁷

- **Reskilling and upskilling across industries.** Changing job roles and skill requirements are leading to a greater demand for existing workers to gain new skills. This is likely to result in a learner cohort that encompasses a variety of ages and backgrounds. Not only will this impact the suite of Training Package materials offered, for example, growth in higher level qualifications and skill sets, but means that VET teachers and practitioners will need to engage with learners with varying education backgrounds, experiences and ages.
- **Increased accessibility of VET.** The movement towards online and flexible learning environments in the sector are increasing the accessibility of VET to new learner cohorts. For example, learners in regional areas that may not have had access to certain courses or providers now have the platforms for engagement.
- **Changing skill base of young learners.** Commentary from industry stakeholders frequently references the changing needs and characteristics of modern learners. For example, young learners typically hold greater digital literacy skills than those in the past due to childhood environments that likely involved the use of technology.
- **Increased engagement of new learner groups.** VET is becoming more accessible to various learner groups. For example, between 2015 and 2016, the number of Indigenous learners increased by 20.1 per cent, equating to approximately 169,500 learners.⁴⁸ Indigenous learners now amount to 4.0 per cent of the total VET learner population. Similarly, learners with disability are increasingly engaging in the VET sector, with an estimated 180,400 VET learners with disability in 2016, a 1.8 per cent increase on 2015.⁴⁹

In this environment of learner change, it is critical that VET teachers and practitioners have the capabilities to understand individual learner needs and implement person-centred strategies to meet them. This places significant pressure on VET workers and requires an emphasis on interpersonal skills in the midst of the technical application of training and assessment capabilities.

What does this mean for the VET workforce?

Job demand	<ul style="list-style-type: none"> • Potential increased demand for all VET workers as growth in international learner numbers will increase the total number of learners in the market, both in and outside of Australia. • Potential for job specialisation to cater for specific learner cohort needs. For example, learners with disability or an ESL background.
Skills needs	<ul style="list-style-type: none"> • Specialisations relevant to skills demands and job roles in international learner home countries. • Identification of individual learner needs and understanding of how to provide support. • Conflict resolution skills. • Enhanced emotional intelligence.

2.4 Creating a future fit workforce

The IRC is required to rank a supplied list of 12 generic workforce skills in order of importance to relevant employers. For the vocational education sector, these skills have been ranked below in Table 9. All skills listed in the table are important and low ranking does not imply that the skill is not important. Rather, lower ranking only indicates that these skills are not critical priorities for the vocational education sector. Further, Table 9 also

⁴⁷ For more information on Australia's International Education Strategy see an International Education Advisory Council report (February 2013) *Australia – Educating Globally*

⁴⁸ NCVER (2016), *Total VET Activity*

⁴⁹ NCVER (2016), *Total VET Activity*. NOTE: data regarding learners with disability should be interpreted with caution given the propensity for some learners with disability to not disclose their condition.

only shows rankings of importance as an average across the whole sector, some skills may have higher or lower importance for particular organisations and particular sub-sectors within the vocational education sector. Note that these skills are read in line with definitions provided by the Department.

Table 9: Ranking of key generic workforce skills

Importance rank	Generic workforce skill
1	Learning Agility/Information Literacy/Intellectual Autonomy and Self-Management skills
2	Language, Literacy and Numeracy (LLN) skills
3	Design mindset/Thinking critically/System thinking/Solving problem skills
4	Communication/Collaboration including virtual collaboration/Social intelligence skills
5	Managerial/Leadership skills
6	Technology use and application skills
7	Customer service/Marketing skills
8	Science, Technology, Engineering and Maths (STEM) skills
9	Environmental and Sustainability skills
10	Data analysis skills
11	Financial skills
12	Entrepreneurial skills

3 Key Drivers for Change and Proposed Responses

Sections 3 and 4 of this ISFPSW serve as the case for change for projects scheduled in 2018-2019:

- Section 3 outlines the key drivers for change and how they will be reflected in 2018-19 training product development work.
- Section 4 outlines the status of 2016-17 projects and the proposed schedule of work through to 2021-22. It also contains the 2018-19 project details including rationales behind projects, Ministers' priorities addressed, consultation plans and the scope of the projects.

The Education IRC has prioritised a holistic review of the Training and Education Training Package in 2018-19. This is in response to current industry trends which are impacting occupations within the VET sector, including changing learner needs, structural changes to the economy and workplaces, technological developments, and VET reform. The information below provides a summary of the key drivers behind this review and the proposed training product responses. The key drivers have been informed by industry consultation and empirical research with industry.

3.1 The evolving role of training in the Australian economy and society

Education is critical to individual, community and national development, and the VET sector plays a primary role in providing such education and training. In 2016, there were an estimated 4.2 million students enrolled in VET delivered by Australian training providers in domestic and overseas locations. As a proportion of the Australian population aged 15 to 64 years, the participation rate in VET is estimated at 24.4 per cent; just under 1 in 4.⁵⁰ These enrolment figures are reflected in VET workforce participation, with studies by the ABS finding that, in 2015, 38 per cent of Australia's workforce were VET graduates.⁵¹ These figures demonstrate the direct reach of the VET industry and, more specifically, the TAE Training Package. Indeed, all 4.2 million students enrolled in 2016 will have received training and assessment from an individual that has undertaken a TAE qualification.

It is important to note, however, that the reach of the VET industry extends further than those directly involved in nationally-recognised training. With the changing nature of the Australian economy and workforce, there is an increasing focus on upskilling and retraining across numerous industries. Large amounts of training occur beyond the boundaries of the VET sector, including in formalised enterprise training programs and in informal workplace learning environments. As industries demand more flexibility and job roles change, this trend is likely to continue. This demand for re-skilling presents the VET sector with an opportunity to play a critical role in transitioning and preparing the workforce for the future of work. As noted by CEDA Chief Executive, Professor the Hon. Stephen Martin, 'VET is vital in delivering key skills Australia needs now and for the future'.⁵²

As the cycle of new skills being required and old skills becoming obsolete continues at an increasing rate, there will be increased emphasis on lifelong learning rather than the traditional 'bottom heavy' model in which education is largely obtained early in life. In response to this, employees are likely to dip in and out of learning

⁵⁰ NCVER (2016), *National VET Provider Collection and National VET in Schools Collection*

⁵¹ CEDA (2016), *VET: Securing Skills for Growth*, p 35; ABS (2015), *Education and Work*, 6227.0 May 2015

⁵² CEDA (2016), *VET: Securing Skills for Growth*, p 4

opportunities – both formal and informal – throughout the entirety of their careers. As noted in PwC’s ‘Workforce of the future’ report, “‘Re-tooling’ will become the norm”.⁵³ Indeed, lifelong learning is already being embraced internationally. For example, the ‘SkillsFuture’ initiative in Singapore gives citizens aged 25 years and over ‘credits’ that can be used to pay for training and education; a program that is proving particularly relevant for older workers requiring skill updates.⁵⁴ Similarly, in the UK, the ‘Unionlearn’ program established by the national Trade Union Centre ensures skills-relevancy for employed union members via on-the-job training.⁵⁵

The challenge in Australia is to make current and future workers aware of the possible disruptions, and a future career that is dynamic, not static, and which encompasses lifelong learning.⁵⁶ Further, skill demands will need to be identified ‘in the moment’ and on an ongoing basis, rather than relying on slow-moving and predictable cues, for example, an ageing population. The critical element will be an education system that is flexible and has the capacity to adapt to changing needs as and when they emerge.

Statistics show that the VET sector is already demonstrating an ability to adapt to changing work and skills needs. As reported by CEDA, the VET sector provides training for a number of sectors and jobs that have a low susceptibility to automation, including childcare, aged care, fitness, and training and development.⁵⁷ This capacity to meet new and emerging skill needs will place the VET sector at the forefront of the Australian education system in the coming years.

Additionally, the VET sector is responding to changing skill demands with an increasing sophistication of the training system. This is evidenced through cross-sector projects that identify common skills across Training Packages and develop training products that are applicable to multiple industries. This leads to synergies between Training Packages and common capabilities amongst learners for generalist skills, a factor that can assist learner and worker career transition. Additionally, Training Packages are increasingly utilising skill sets in addition to, or in replace of, traditional qualification structures: skill set enrolments doubled between 2015 and 2016, from 153,700 to 325,200.⁵⁸ Skill sets allow learners and workers to undertake smaller training segments as necessitated by their job role. Thus, as workers increasingly move through careers and occupations, their skills needs will change and short training segments may provide valuable contributions.

In this environment of change and opportunity, it is critical that the VET sector is productive and valuable, a factor that can only be achieved through a competent VET workforce of trainers and assessors. If training delivery is of poor quality, it will not produce positive economic impacts and will not prepare learners for future job roles. Additionally, it is essential to note that the emerging demand for lifelong learning and continued upskilling will be equally important to VET teachers and practitioners. Whilst VET teachers and practitioners assist in the upskilling of the broader workforce to meet changing job roles, they will similarly need to adopt these practices themselves, for example, through continual professional development.

3.2 Transformation of job roles in the VET sector

In response to the evolving demand on the VET sector, the job roles of VET trainers and assessors are expanding. Traditional conceptions of training and assessing in the VET sector may have involved a full time trainer in the RTO setting, assessing capabilities against a formal qualification structure. However, with changing skill and occupation demands, training and assessing is increasingly occurring in a variety of contexts beyond the traditional VET environment. As the demand for lifelong learning increases and reskilling becomes commonplace, the need for trainers and assessors in a plethora of differing environments and with differing capabilities will likely increase.

⁵³ PwC (2017), *Workforce of the future: The competing forces shaping 2030*, p 7

⁵⁴ AlphaBeta, *The Automation Advantage*, p 31, < <http://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>>

⁵⁵ AlphaBeta, *The Automation Advantage*, p 31, < <http://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>>

⁵⁶ Microsoft Australia (2018), *Building Australia’s future-ready workforce*, p 28, < <https://msenterprise.global.ssl.fastly.net/wordpress/2018/02/Building-Australias-Future-Ready-Workforce.pdf>>

⁵⁷ CEDA (2016), *VET: Securing Skills for Growth*, p 36

⁵⁸ ACPET, *Data snapshot: Private provision of VET - Role and performance of private training providers in Australia, Summary of 2016 Total VET Activity*

The job roles of trainers and assessors in these varying fields will substantially differ. For example, differences may include the prominence of training and assessment functions. Therefore, the premise that a single qualification can meet the needs of all learners and future workers - a 'one-size-fits-all' TAE - is problematic. The TAE40116 Certificate IV in Training and Assessment is not suitable for the plethora of occupations that are utilising training and assessing principles. The Certificate IV includes content which is overly complicated and unnecessary for some job roles, yet the content is too simplistic for others. The end result is a qualification that is inappropriate for most job roles in training and assessment, a factor which substantially increases the likelihood that the needs of learners will not be met.

Developing industry consensus on a capability framework for training and assessment job roles would assist in understanding the breadth of job roles for which the Certificate IV in Training and Assessment caters. The framework would highlight the job roles that provide training and assessment and would identify the commensurate skill and knowledge needs of those job roles. For example, the framework would highlight the parameters of training on a rural mine site for job specific OH&S and how this differs from the training and assessment requirements of the delivery of a Certificate IV in Ageing Support in an urban RTO. The job roles of trainers and assessors in each of these scenarios are different, and the use of the same base qualification to meet the needs of the job roles is inappropriate, thus demonstrating the shortfalls of a 'one-size-fits-all' approach to the TAE.

Recognition of the increasing complexity of the VET sector may assist in the professionalisation of VET occupations. Stakeholder feedback suggests that some facets of the sector suffer from a lack of professionalisation, a factor that is likely linked to the lack of occupation identity as well as the increased casualisation of the workforce. Movement towards the professionalisation of the VET sector can be fostered through a review of the TAE Training Package and changes to the way the Training Package is structured and the opportunities it provides. This could include a review of the more advanced TAE qualifications, such as the Diplomas, which provide pathways through the sector and, feedback suggests, are well regarded qualifications within industry. Tailoring TAE qualifications to more specific occupations will assist in the professionalisation of the sector, moreover, it will assist in attracting and retaining quality trainers as individuals will feel that their qualification is central to their occupation and a relevant component of workforce participation.

3.3 Changing learner characteristics and needs priorities

The needs of VET learners are changing and it is critical that the training provided to VET teachers and practitioners enables them to understand and meet these needs. Whilst trainers and assessors have always been required to understand and address learner needs, with the changing VET sector environment, it is likely that the breadth of future learner needs will be significantly greater. Indeed, with a future demand for lifelong learning, upskilling and reskilling, it is likely that the composition of the VET cohort will change in the future.

Learner needs that will likely influence the future delivery and assessment of VET materials, as well as the structure of the system as a whole, include:

- **An older learner cohort.** Industry demand for reskilling will encourage older demographics to participate in VET. Whilst the full effect of this change in demand is unlikely to be represented in enrolment data for several years, NCVET findings already indicate growth in enrolment numbers of older age brackets. Between 2015 and 2016, enrolments for learners in the age bracket 25-64 years increased by 7.2 per cent, from 2.5 million to 2.7 million.⁵⁹ This growth will challenge the traditional conception of VET as an education avenue for young learners and may also influence the qualification model, with potential demand for 'bite sized' training options.
- **Learners with mixed education backgrounds.** Lifelong learning will be applicable across various industries and occupations, thus, it is likely that further training will be undertaken by learners with varying backgrounds. Indeed, there will be equal need for training for individuals that have a lengthy education history but require upskilling for their occupation, and for individuals seeking baseline skills to enter the job market. In this environment, entry level qualifications and advanced skill sets will be equally important facets of the VET curriculum. Additionally, there may be an increase in VET uptake by Secondary School

⁵⁹ NCVET (2016), *Total Vet Activity*

learners due to increasing interest in quality vocational pathways alongside academia. For example, through P-TECH schools.

- **Preferred learner engagement methods.** As previously discussed, learner engagement and demand for digital modes of training delivery have increased in recent years. As this trend continues, it will impact the amount of training content that is delivered online and will demand digitally-enabled VET teachers. Additionally, with learners likely to be reskilling throughout their careers, the capacity for training to be delivered in large, time consuming segments may be hindered. Reskilling will need to be flexible to complement existing job roles and sit amongst pre-existing worker obligations.
- **Learner demand for training in growth industries.** Demand for workers in specific areas of the economy will drive a need for learners to engage in training in these areas. This trend will influence the need for VET teachers and practitioners in certain sectors, with teachers in service-related industries likely to be in demand.
- **VET teachers and practitioners will be learners.** Whilst VET workers are catering for a workforce that requires continual reskilling and upskilling, the demand for lifelong learning practices will be similarly relevant to VET teachers and practitioners. Therefore, VET teachers and practitioners will need to continually upskill and evolve in accordance with skill needs and the Training Package must enable and encourage this continued professional development and learning.

The implication of these learner characteristics and needs will be an increased demand for flexible and adaptable VET teachers and practitioners. Trainers will need to have the skills and capabilities to modify their teaching and assessing methods to meet the needs of their learners. Adaptability skills and an understanding of how to meet learner needs must be incorporated into the TAE to provide trainers with these skills, as well as avenues to allow teachers and practitioners to continually learn and upskill.

Proposed Responses

The following is proposed in response to the above key industry drivers for change for the training and education sector:

Table 10: Proposed responses

Proposed Responses

1. **Review the structure of the TAE Training Package.** This will include:
 - **Confirming a suitable capability framework** to identify the varying job roles of workers in the sector and the skills and knowledge requirements of these job roles. This will demonstrate the varying functions undertaken by VET teachers and practitioners and the demand for training specific to their job role. Existing capability frameworks will be considered in the first instance, and if industry does not come to a consensus on what existing capability framework should be used, a new one may be developed.
 - **Reviewing the structure of the six TAE qualifications**, with particular reference to:
 - The capacity of a single qualification - the Certificate IV in Training and Assessment - to sufficiently provide training for all entrants to the industry;
 - The demand for job-specific qualifications to ensure trainers and assessors are trained for their job role;
 - The avenues for VET teachers and practitioners to undertake continued learning, development and upskilling;
 - Flexibility of qualifications to meet individual learner or occupation needs; and
 - Adaptability of qualifications to meet changing learner and worker demands.
 - **Assessing the creation of new TAE qualifications** to provide additional avenues into the training and assessment sector and to meet specific job roles.
 - **Assessing the avenues for career progression** in the industry as facilitated by the Training Package. Particular consideration should be given to the opportunities given to workers in the sector to upskill and advance their careers.

Proposed Responses

- **Assessing the creation of new skill sets** within the TAE Training Package to meet specific skill requirements within the sector and allow for new specialisations.
2. **Review the content of the TAE Training Package**, this will include:
- **Review content of units of competency** (including elements, performance criteria and evidence) for their currency and industry relevance to occupational roles.
 - **Assess the creation of new units of competency** that are identified as being in scope for this project.

Implication of proposed response for stakeholders

Table 11 provides a description of all expected impacts relative to stakeholders, given the proposed responses.

Table 11: Implication of proposed responses for stakeholders

Stakeholder	Impact
Industry/Employers	<ul style="list-style-type: none"> • Employees are work-ready with job-specific skills. • Quality workers are retained in the industry as there are opportunities for career progression and development. • The nuances of individual industries are catered for by teachers and practitioners that have undertaken training specific to the training and assessment demanded in the sector. • A better trained and skilled workforce, thereby facilitating greater productivity.
Employees	<ul style="list-style-type: none"> • Improved employability and job-readiness as training will more closely align to job roles. • Greater opportunities for upskilling within the profession. • Recognition of the varying job roles and requirements throughout industries. • Potential cost to individual workers to upskill to meet new requirements.
Registered Training Organisations	<ul style="list-style-type: none"> • VET teachers and practitioners that have job role specific skills and capabilities. • VET workforce with career development opportunities and opportunities for RTOs to provide options for continued learning. • Additional costs to RTOs to update training material scope to meet the revised requirements of the TAE Training Package.
Other IRCs/ Training Packages	<ul style="list-style-type: none"> • Learners in non-TAE courses will benefit from trainers and assessors that are skilled specifically in their area of operation.
Government	<ul style="list-style-type: none"> • Workforce that has the skills to effectively participate and engage in their occupation. • Potential for greater engagement of Secondary School learners through enhanced VET quality. • Movement towards a 'knowledge economy'. • Improved reputation of the VET sector, domestically and internationally.

Implication of proposed response for occupations in the industry

It is anticipated that the proposed changes will impact the following occupations:

- Vocational Education Teachers

Risks and sensitivities

The base case (the 'do nothing') option must be considered as an alternative to the proposed changes in order to enable effective comparison between the two scenarios. This option negates the need for investment in training

products, however does not address the current state issues identified. The likely impacts of this option are outlined below:

Table 12: Risks of not proceeding

Existing issue	Likely impact(s) if not addressed
<i>Trainers and assessors receive 'one-size-fits-all' training.</i>	<ul style="list-style-type: none"> The skills and capabilities that VET teachers and practitioners learn are not specific to the type of role they will undertake. Some learners undertake skills/units they will not utilise in the work place, whilst other learners do not receive training comprehensive of their future job role. This may lead to some sectors circumventing the TAE Training Package and developing industry based training.
<i>Lack of career progression for trainers and assessors.</i>	<ul style="list-style-type: none"> VET teachers and practitioners do not engage in continued, formal learning to enhance and build their skills. Teachers and practitioners may be lost from the industry.
<i>Learners in the VET system suffer from teacher and practitioner quality.</i>	<ul style="list-style-type: none"> The training learners receive may not be up to the necessary standards or quality. This may impact their ability to effectively participate in the workforce. Potential learners may not engage in the VET sector.
<i>Enterprise and employer confidence in the VET system is further eroded.</i>	<ul style="list-style-type: none"> Enterprises and employers will withdraw from nationally-recognised training in favour of non-accredited training or training in alternative education sectors if quality and flexibility issues are not sufficiently addressed.

A number of sensitivities raised during consultation will be important to consider throughout the review of the TAE Training Package. These include:

Table 13: Sensitivities relevant to the proposed project

Sensitivities	Likely impact(s)
<i>Sector fatigue with reviews.</i>	<ul style="list-style-type: none"> Following the release of TAE16 in 2016 and the revised packaging rules of TAE40116, there may concerns within industry regarding further reviews and potential change. The deficiencies of the existing Training Package must be weighed against the sector's fatigue with change. It is the view of the IRC that a transparent, considered, consultative and well-communicated review is the best course of action.
<i>Complexity of relationships between stakeholders involved.</i>	<ul style="list-style-type: none"> The differing views of stakeholders across the education sector and beyond will be brought to light in this review. Ideology and historical disagreements have the potential to impact negatively upon the process. Considering the views of different stakeholders and groups will be essential to the review's objectivity and eventual success. Transparency of process and open consultation, along with the objectivity of the IRC, will assist in addressing these concerns.
<i>Potential removal of units or qualifications.</i>	<ul style="list-style-type: none"> There may be some concern in industry regarding changes to the Training Package and packaging rules of some qualifications and units of competency.

Sensitivities	Likely impact(s)
	<ul style="list-style-type: none">• Broad and comprehensive stakeholder consultation will ensure that a diverse range of perspectives are considered and that potential changes reflect the needs of industry as a whole.

PwC's Skills for Australia will ensure future consultations address these sensitivities to reach a consensus around the most appropriate response and subsequent training product development.

DRAFT

4 Proposed Schedule of Work

Sections 3 and 4 of this ISFPSW serve as the case for change for projects scheduled in 2018-2019. Section 4 outlines:

- The status of 2016-17 and 2017-18 projects and the proposed schedule of work through to 2021-22.
- 2018-19 project details including rationales behind the project, Ministers' priorities addressed, consultation plans and the scope of the projects.

The Proposed Schedule of Work presents activities anticipated to be conducted through to June 2022. This section is structured into three parts:

- **Status update for Year One (2016-17) and Year Two (2017-18) projects**
- **2018-19 Project Details**
- **Proposed Schedule of Work - 2017-18 to 2021-22**

Status for Year One (2016-17) and Year Two (2017-18) projects

The Education IRC scheduled various projects for Years One and Two, as shown in Table 14 below.

Table 14: Progression of 2016-17 and 2017-18 projects

Year	Project type	Status	Project code	Project name	Number of UoCs		
					Native	Imported	Total
2016-17	Training product development	Consultation for Case for Endorsement completed, unit review and rewriting underway.	1A	Review of the Foundation Skills Training Package	91	0	91
2016-17	Additional activity	Completed.	2A	Develop and carry out stakeholder engagement sessions in response to concerns over the new TAE Training Package	N/A	N/A	N/A
2016-17	Additional activity	Completed.	2B	Strategic review of reform in TAE	N/A	N/A	N/A
2016-17	Additional activity	Completed.	2C	Review of skill sets	N/A	N/A	N/A
Total UoCs reviewed in year 1					91	0	91
2017-18	Additional activity	Project to be considered as part of broader	2D	Review career pathways in the Training and	N/A	N/A	N/A

Year	Project type	Status	Project code	Project name	Number of UoCs		
					Native	Imported	Total
		review of TAE Training Package.		Education Training Package			
Total UoCs reviewed in year 2					0	0	0

2018-19 Project Details in the Proposed Schedule of Work

Description

As discussed in the body of this report, the demand on the VET sector is changing and it is critical that the TAE prepares VET teachers and practitioners to engage in this environment. The objective of this project is to review the structure and content of the TAE Training Package to ensure that the changing job roles and work environments of trainers and assessors are met. This will ensure that the VET sector can meet the needs of the workforce of the future. The project will involve the review of six qualifications and 54 units of competency within the TAE Training Package, with the potential for new content and restructuring.

Rationale

Please see **Section 3 Key Drivers and Proposed Responses** of this document.

Ministers' Priorities

Reform	Evidence of reform being addressed
<i>Removing obsolete and superfluous qualifications from the training system.</i>	Initial consultation has indicated a need for additional qualifications within the TAE Training Package, rather than fewer. However, current qualifications will be assessed for industry relevance and usability and those that are obsolete will be deleted and likely replaced by more relevant content.
<i>Making more information available about industry's expectations of training delivery.</i>	The importance of this project to the VET sector as a whole will drive an extensive stakeholder consultation process. Consultation will focus on understanding the current and future state of the VET sector, and will be informed by a review of capability frameworks. Industry expectations will be outlined in a Companion Volume and all training products will be formulated to ensure ease of understanding. This will confirm awareness amongst users of training delivery expectations and facilitate consistent learner quality.
<i>Ensuring the training system better supports individuals to move easily from one related occupation to another.</i>	A central facet of the project will be consideration of how to provide VET teachers and practitioners with career development opportunities. The review will consider the need for and development of training pathways through the TAE, as well as the education sector more broadly.
<i>Improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a work and participation bank.</i>	Where the project assesses the creation of new units of competency, consideration will be given to the portability of the unit into other Training Packages. Additionally, existing units of competency in other Training Packages will be considered for inclusion, where appropriate, in TAE qualifications. Imported training products are particularly relevant to the TAE as they provide learners with specialised and occupation-specific skills.
<i>Fostering greater recognition of skill sets.</i>	Throughout the course of consultation, the development of skill sets in the TAE Training Package will be tested with

Reform	Evidence of reform being addressed
	stakeholders. This will be particularly relevant when considering the emergence of new job roles and skill needs, as well as the need for career progression opportunities in the VET sector.

Scope of Project

We anticipate the Case for Endorsement to be provided to the AISC in December 2019. This extended timeframe is to ensure that broad and comprehensive consultation can occur.

Training Package to be developed/revised:

Training and Education (TAE) Training Package

6 existing Qualifications to be revised:

Certificate IV in Training and Assessment

Diploma of Vocational Education and Training

Diploma of Training Design and Development

Graduate Certificate in Digital Education

Graduate Diploma of Adult Language, Literacy and Numeracy Leadership

Graduate Diploma of Adult Language, Literacy and Numeracy Practice

54 existing Units of Competency to be revised

- TAEASS301 Contribute to assessment
- TAEASS401 Plan assessment activities and processes
- TAEASS402 Assess competence
- TAEASS403 Participate in assessment validation
- TAEASS501 Provide advanced assessment practice
- TAEASS502 Design and develop assessment tools
- TAEASS503 Lead assessment validation processes
- TAEASS504 Develop and implement recognition strategies
- TAEASS505 Lead and coordinate assessment systems and services
- TAEASS801 Analyse, implement and evaluate e-assessment
- TAEDEL301 Provide work skill instruction
- TAEDEL401 Plan, organise and deliver group-based learning
- TAEDEL402 Plan, organise and facilitate learning in the workplace
- TAEDEL403 Coordinate and facilitate distance-based learning
- TAEDEL404 Mentor in the workplace
- TAEDEL501 Facilitate e-learning
- TAEDEL502 Provide advanced facilitation practice
- TAEDEL801 Evaluate, implement and use ICT-based educational platforms

- TAEDEL802 Use e-learning with social media
- TAEDES401 Design and develop learning programs
- TAEDES402 Use Training Packages and accredited courses to meet client needs
- TAEDES501 Design and develop learning strategies
- TAEDES502 Design and develop learning resources
- TAEDES503 Design and develop e-learning resources
- TAEDES504 Research and develop units of competency
- TAEDES505 Evaluate a training program
- TAEICR501 Work in partnership with industry, enterprises and community groups
- TAELED801 Design pedagogy for e-learning
- TAELED802 Investigate the application of ICT content knowledge
- TAELED803 Implement improved learning practice
- TAELED804 Review enterprise e-learning systems and solutions implementation
- TAE LLN411 Address adult language, literacy and numeracy skills
- TAE LLN412 Access resources and support to address foundation skills in vocational practice
- TAE LLN413 Integrate foundation skills into vocational training delivery
- TAE LLN501 Support the development of adult language, literacy and numeracy skills
- TAE LLN801 Analyse and apply adult literacy teaching practices
- TAE LLN802 Analyse and apply adult numeracy teaching practices
- TAE LLN803 Develop English language skills of adult learners
- TAE LLN804 Implement and evaluate delivery of adult language, literacy and numeracy skills
- TAE LLN805 Design and conduct pre-training assessment of adult language, literacy and numeracy skills
- TAE LLN806 Lead the delivery of adult language, literacy and numeracy support services
- TAE LLN811 Analyse policy and formulate strategic language, literacy and numeracy response
- TAE LLN812 Research and implement new adult language, literacy and numeracy practices
- TAE LLN813 Formulate workplace strategy for adult language, literacy and numeracy skill development
- TAE LLN814 Design programs to develop adult language, literacy and numeracy skills
- TAE LLN815 Develop strategy for adult language, literacy and numeracy skill development in a community program
- TAE LLN816 Initiate, develop and evaluate adult language, literacy and numeracy resources
- TAE LLN817 Design, implement and evaluate a language, literacy and numeracy professional development program
- TAE PDD501 Maintain and enhance professional practice
- TAE RES501 Apply research to training and assessment practice
- TAE SUS501 Analyse and apply sustainability skills to learning programs
- TAE SUS502 Identify and apply current sustainability education principles and practice to learning programs
- TAE TAS401 Maintain training and assessment information

- TAETAS501 Undertake organisational training needs analysis

Consultation Plan

To ensure training product development is a reflection of broad industry-driven demand, PwC's Skills for Australia intends to seek feedback for this project via the following methods:

- Industry Project Working Groups (PWGs)
- Open forums across a variety of states and locations
- Focus groups (in person and/or via teleconference)
- Targeted one-on-one consultations (in person and/or via teleconference)
- Online nationwide survey
- Desktop research

PwC's Skills for Australia intends to engage a wide range of stakeholders relevant to the VET industry. Types of stakeholders to be consulted with include:

- *Employers*, essential to the VET sector given the role that they play in demanding the skills that lead to vocational outcomes.
- *Industry associations/Peak bodies*, who act on behalf of the VET teachers and practitioners to represent their needs and promote the interests of their member organisations.
- *Registered Training Organisations*, who deliver either existing TAE training products or national/state accredited courses relevant to the area of scope.
- *Public/Government bodies*, who are often responsible for legislative requirements and funding arrangements affecting the training and education sector.

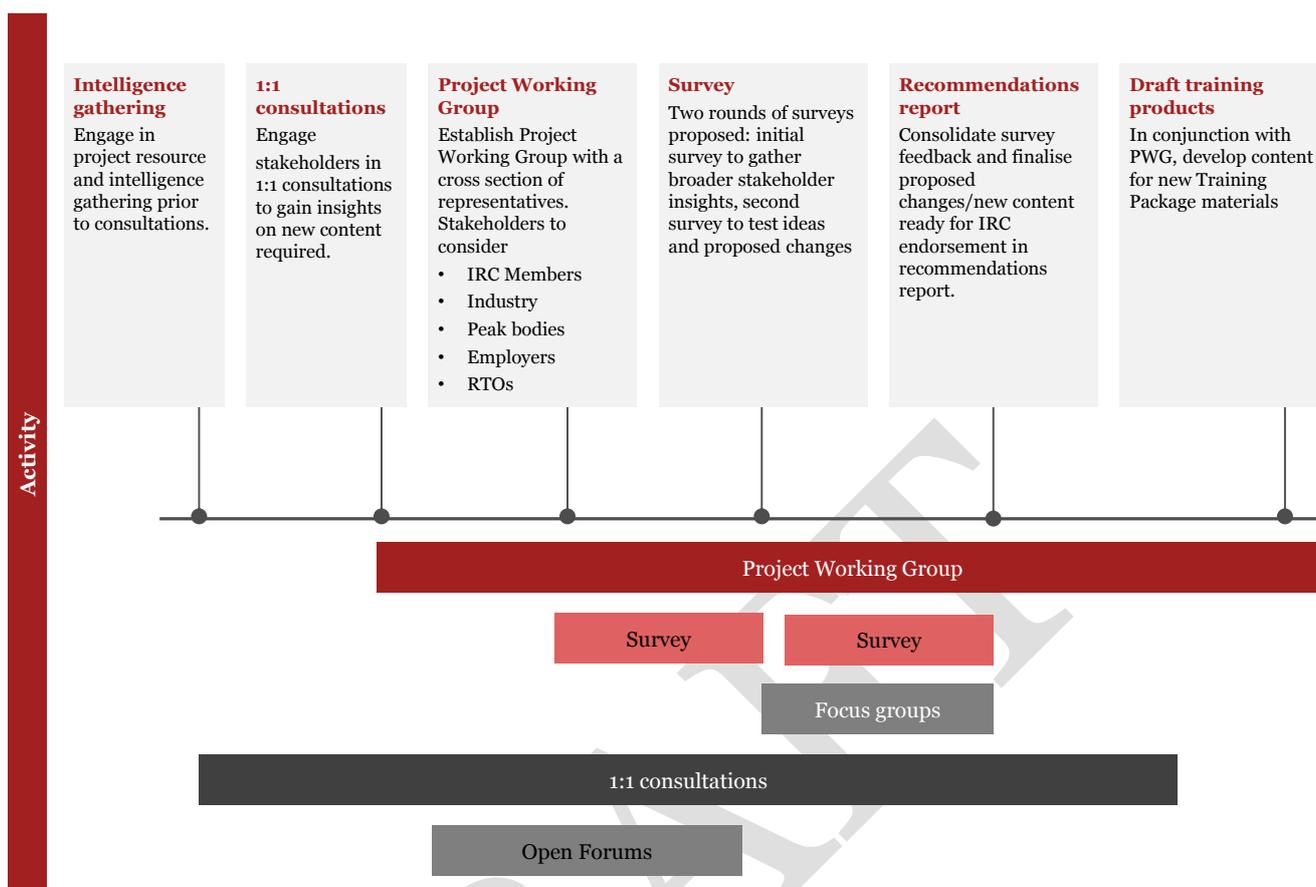
Examples of stakeholders that will be consulted as part of this project are listed in the table below. The list is not exhaustive and it is intended that as consultation progresses, additional stakeholders will be identified and their perspectives captured and considered.

Table 15: Examples of stakeholders to engage

Employers	Industry associations/Peak bodies	Registered Training Organisations	Public/Government bodies
<ul style="list-style-type: none"> • RTOs • Enterprise RTOs 	<ul style="list-style-type: none"> • ACPET • TAFE Directors Australia • Unions • Enterprise RTO Association • Business Council of Australia • Australian Chamber of Commerce and Industry • Australian Industry Group 	<ul style="list-style-type: none"> • TAFEs • Private RTOs • Enterprise RTOs • Universities 	<ul style="list-style-type: none"> • ASQA • TAC • VRQA • State and Territory Training Authorities • Federal Department of Education and Training

Refer to Figure 7 for an indicative approach to stakeholder consultation for this project.

Figure 7: Stakeholder consultation plan



Proposed Schedule of Work – 2017-18 to 2021-22

Table 16 presents the Education IRC Proposed Schedule of Work through to June 2022. Specifically, it contains the activities endorsed by the IRC through to June 2021 in the previous ISFPSW, and an action to review all UoCs in 2017-18 projects for currency in 2021-22. Previously endorsed projects have been reviewed to ensure alignment with AISC and COAG Industry and Skills Ministers’ priorities, following advice from the Department. Specifically, the Department asks that the review of UoCs is aligned to the qualifications that form part of the VET Student Loans Program, review of qualifications with low or no enrolments, reduction of duplication across the system, creation of cross-industry UoCs and great recognition of skill sets.

Noting the small amount of native UoCs in the Education Training Package (54), it is expected that all units will be able to be reviewed by the 2018-19 period. This is consistent with AISC guidance that the Training Package should, where possible, be reviewed in its entirety.

Table 16: Summary Proposed Schedule of Work

Year	Project type	Project code	Project name	Number of UoCs
2016-17	Additional activity	2D	Review career pathways in the Training and Education Training Package	Project to be considered as part of broader review of TAE Training Package.
2018-19	Training Product Development	1B	Review of all Units of Competency in TAE v2.1	54
2020-21	Training Product Development	1C	Review FSK Units of Competency reviewed in 2016-17	91
2021-22	Training Product Development	1D	Review training products originally in scope for 2017-18 for currency and relevance	Unknown
2021-22	Training Product Development	1E	Review the need for the creation of new training products to cater for new and emerging technologies and related skills	Unknown

5 IRC signoff

This Industry Skills Forecast and Proposed Schedule of Work was agreed to by:

[date]

Andrew Shea

Chair

Education IRC

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Appendix A Administrative information

About the Industry Reference Committee

The Education IRC includes 14 members. Membership of the IRC was constituted in 2016 and refreshed in 2017. The 2018 Industry Skills Forecast and Proposed Schedule of Work (ISFPSW) was reviewed and approved by the IRC Members below in May 2018.

Name	Organisation	Title	IRC role
Andrew Shea	Australian Council for Private Education and Training (ACPET)	Committee Member	IRC Chair
Elisa Uyen	Pivot Institute	CEO	IRC Deputy Chair
Berwyn Clayton	Victoria University	Emeritus Professor, College of Arts and Education	IRC Member
Chris Butler	Enterprise RTO Association	President	IRC Member
Christine Robertson	TAFE Directors Australia	Deputy Chair	IRC Member
Daniella Mayer	Australian Council for Adult Literacy (ACAL)	Vice-President	IRC Member
Daryl Sutton	Victorian Curriculum & Assessment Authority (VCAA)	Manager - Vocational Education	IRC Member
David Tout	Australian Council for Educational Research (ACER)	Manager - VET and Senior Researcher	IRC Member
Erica Smith	Federation University	Professor and Personal Chair in Vocational Education and Training	IRC Member
Jenny Fitzgibbon	Training that FITZ	Manager/Consultant	IRC Member
Jo Pyne	TAFE Queensland	General Manager	IRC Member
Michael Taylor	Australian Industry Group	National Policy and Projects Manager, Education and Training	IRC Member
Robyn Culbert	Salvation Army	Quality Education Manager, Eva Burrows College	IRC Member
Sandra Walls	Box Hill Institute	Acting Executive Director Academic Affairs (VET and HE)	IRC Member

About PwC's Skills for Australia

PwC's Skills for Australia supports the Education IRC.

As a Skills Service Organisation (SSO), PwC's Skills for Australia is responsible for working with industry to:

- Research what skills are needed in our industries and businesses, both now and in the future, to provide the right skills to match our job needs; helping us to stay at the forefront of global competitiveness and support continued economic prosperity.
- Identify and understand current and emerging trends in the global and domestic economy and how they impact on Australia's skills needs.
- Work with the IRCs to revise our qualifications and training content to better match what people learn with the skills needs of our industries and businesses, giving our population the best possible chance of developing work ready skills.

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Appendix B Other relevant skills-related insights for this sector

Insights and updates on Foundation Skills

PwC's Skills for Australia and the Education IRC received early approval for a review of the Foundation Skills (FSK) Training Package. Given that the review is underway, and as the Training Package is unique in its structure and lack of occupational outcomes, we will briefly touch on the issues facing the Training Package here rather than in other sections in the document.

The Foundation Skills Training Package is designed to provide learners with the skills required to enter the workforce or access further vocational education and training, such as some employability skills and language, literacy and numeracy (LLN) skills. The Training Package is essential in ensuring that as many people as possible have access to educational and work opportunities. However, feedback from industry and providers strongly indicates that the Training Package is failing to deliver this outcome. Reasons include:

- **The foundation skills of Australian adults still need improvement**
- **There has been poor uptake of the Package**
- **Issues with Package content and structure.**

Industry has indicated that the Package requires review to address a number of issues including skills gaps, inconsistencies in delivery, poor visibility of UoCs and the need for clarity of learning outcomes.

Issues with Foundation Skills Training Package content and structure

Through initial discussions with IRC Chairs and the Education IRC, a consistent theme emerged that Foundation Skills courses are not well understood or being delivered effectively. This raised a range of issues and opinions including:

- The FSK Training Package and associated material is not fully understood by training providers leading to lack of use and misperception.
- More flexibility is needed in FSK qualifications and the applicability of FSK units to cater for spiky profiled learners (learners with varying levels of competency across different skills areas) and those not yet in the workforce.
- There is little evidence of usable Skill Sets that are adopted by industry or used in conjunction with entry level employment.
- The FSK Training Package should closely align to the ACSF and where practicable give trainers guidance on how to use the package to improve the core skills of learners.
- Units are overwhelmingly used as part of FSK qualifications and there is an appetite to encourage the use of units in qualifications in other Training Packages.
- Some skills gaps exist in the areas of digital literacy and employability skills, but the extent to which these should be met in FSK depend on the progress of future cross sector work.
- There were a range of other considerations that fall outside of the scope of this review however are relevant for discussion. These include but are not limited to funding and modes of delivery.

Further, the proliferation of accredited courses suggests that the FSK Training Package is not meeting the demands of the market, with RTOs and learners preferring non-Training Package accredited training. We estimate there are 65 accredited courses linked to the Foundation Skills Training Package. This compares with three qualifications in the Training Package itself. No other Training Package that we are aware of displays such an imbalance between Training Package qualifications and accredited courses. Many of these accredited courses are approaching their re-accreditation application dates. An immediate review of the Foundation Skills

Training Package will allow us to appropriately incorporate these accredited courses into the Training Package as they reach re-accreditation dates.

Update on the review of the FSK Training Package

PwC's Skills for Australia made recommendations in its 'Summary Report of Consultation Outcomes' in August 2017. The report outlined the rationale behind recommendations based on consultation with the FSK Project Working Group and open forums held earlier that year.

The recommendations made in the 2017 Summary Report are now being expanded upon to determine the specifics of required change and to validate any changes requiring further consultation. A meeting was held in March 2018 with the FSK Project Working Group to discuss these changes, and various subject matter experts have been engaged in the early stages of this consultation work.

Below is an indicative timeline of stages for the review of the FSK Training Package.



Work currently being confirmed in consultations includes:

- Reviewing, creating and importing units to realign with industry
- Reviewing units to provide more clarity in application
- Reviewing packaging rules of qualifications
- Reviewing training product names
- Suggesting unit clusters

These changes will be developed with the importance of maintaining flexibility and versatility of the Package across different vocational contexts in mind.

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